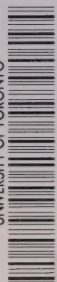


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Barter has largely taken its place. In terms of cash the cost of living has gone up about ten times. And the favourite pastime is to find a job or racket by which you work, not for money, but for something solid and physical.

You rear half a dozen chickens for example, and trade them off against a pair of shoes or the dentist's bill. —Allan Moorhead in SATURDAY NIGHT



P. G. ANDERSON, D.D.S.

Toronto, Ontario

Chairman of Convention Committee
National Convention of Canadian Dentists

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MANDIBULAR MOVEMENTS AND THE ARRANGEMENT OF TEETH

by C. H. MOSES, D.D.S., Hamilton, Ontario

ALTHOUGH some excellent work has been done by dental scientists on the subjects of articulation, mandibular movements, design and arrangement of teeth, we still find a great deal of disagreement in the dental literature on about every phase of these subjects. Perhaps our approach has been too mechanical. We have attempted to apply mathematical precision of a static nature to the living, ever-changing, ever-compensating and complex mechanisms of living function.

The more one studies tissue the more one is impressed by the fact that a seething struggle is going on both macroscopically and microscopically, between anabolism and katabolism, between overfunction and underfunction, between waste and repair and between toxins and antitoxins. That body of ours is adaptable. It changes with its environment. This is an evolutionary process that probably took us millions of years to acquire. Therefore changes are constantly taking place in all parts of our masticatory apparatus as well as in other parts of our body. Our apparatus is so versatile that a mere machine can never be made to reproduce the mandibular movements because they are so varied, so many and so complex.

But we have to make artificial teeth.

Therefore we must plan our technique so that when these teeth are ultimately worn in the mouth, they will be compatible with some of the laws of nature and not antagonistic. Let us begin by pointing out some of the errors of the past so that we may profit by them in the future.

About the first attempt to mechanically standardize the mandibular movements was by Bonwill¹, who evolved the theory of the "Equilateral Triangle". He concluded that lines drawn from the contact point between the lower central incisors to the crests of the condyles and from one condyle to the other formed an equilateral triangle whose sides were four inches. Dentists believed that for a good many years. He also stated that the axis through each condyle was the axis for the opening and closing movement. This is still being taught at most of the universities because articulators such as the Hannau and Gysi which act in that manner are the official instruments employed in teaching the students. This is one of the biggest hoaxes in dentistry and has been the causative factor in the destruction of a great many ridges. It is about time that something drastic was done to acquaint dentists of the injuries that may be caused by placing the axis in the wrong position on

an articulator and setting teeth there-to.

The only accurate position that can possibly be obtained by the use of these articulators is centric. *Any motion away from centric must be inaccurate if the axis is not accurate!* Either this statement is correct or it is incorrect. *There can be no compromise.* The explanation that articulators are not intended to give an exact reproduction but rather a resultant movement is entirely inadequate. As scientists, dentists must be brave enough to discard articulators that are not only inaccurate but which are injurious. No one can be a scientist without the quality of courage. If an obvious truth is at the moment a minority opinion, it should not be postponed for a more appropriate time. A truth withstands the test of time. And an untruth falls by the wayside.

Is the opening axis, then, not in the condyle head? How do we know? As far back as 1889, C. E. Luce² proved experimentally that the "condyles began to move forward with the beginning of opening". Hall³ agrees with this. Prentiss placed the centre of the axis at the mandibular foramen. Grant⁴ also believes this. Kurth⁵ stated that it was not in the condyle head. All this seems logical to believe because if the vicinity of the axis were near the mandibular foramen there would be less danger of injury to the inferior dental nerve and artery because of movement. The very fact that some suspect, rightly or wrongly, that a closed bite could cause deafness because the condyle would be driven back to the posterior of the mandibular fossa indicates that the axis must be elsewhere. The fact that the condyle is displaced, sometimes, over the eminentia articularis when we yawn too widely means that it couldn't have been the axis. The axis has to be elsewhere for the condyle to move forward. Kurth⁶ also stated that "a careful analysis . . . demonstrates that it is impossible for one pivotal point

to be the centre of the movement". There may be, therefore, a number of axes, each the result of a balance of muscular pulls.

There is still some clarification necessary about the role that the condyle plays in mandibular movement. Dr. Frank M. Lott⁷ did some extensive investigation on the condyle and the mandibular fossa. He found the condyles to have many shapes and irregularities. It does not appear that they could be standardized. The writer believes that the size and shapes of the condyles and the mandibular fossae are caused by the particular function or activity of that particular jaw.

Breitner⁸ did some experiments using *Macacus rhesus* monkeys, altering the occlusion in several ways by using orthodontic appliances. With each alteration of the positions of the teeth he was able to show alterations in the shapes of the mandibular fossae and condyles. There was resorption of bone in some places and deposition of new bone in others depending upon the adjustments necessary to accommodate the altered positions of the teeth. Nature has the mechanisms to alter the shape of bone to meet new directions of stress. Therefore we see that the shapes of the condyle and mandibular fossa can change. Perhaps the changes to meet new positions due to alterations of tooth arrangement are easier in younger people. Orthodontia is easier in younger people than in older ones.

Conversely the condyle and the path it travels, by virtue of its shape and that of the fossa, can influence the path of artificial teeth when permitted. The direction of muscular pull can also influence it. Certainly, in edentulous mouths we should attempt to follow that path if we wish to maintain the *status quo* of the tissues. If we don't, nature will attempt to make an adjustment, and the end result may not be the one desired.

Articulators have been designed to

imitate the movement of the condyle. These are often portrayed by a ball (the condyle) moving in a slot (the mandibular fossa). The path is angulated by degrees on the articulator. Thus a path is said to have an inclination of 10, 20 or 30 degrees. Our x-rays of the condyle also give us the similar impression. We have, in the main, adopted the plan of viewing the condyle as it sits in the fossa from a lateral view. The impression has been implied that the angle formed is uniform throughout the length of the condyle. Nothing can be further from the truth.

The writer has done a number of dissections of the same head at different levels; starting with the lateral of the condyle and progressively cutting off slices until the last $\frac{1}{4}$ inch was reached at the medial end (Figs. 1-7). At each level the angulation is different. The medial or inner part

of the gliding condyle does not travel as far when the mandible is moved laterally as the lateral or outer part does. When we examine the joint

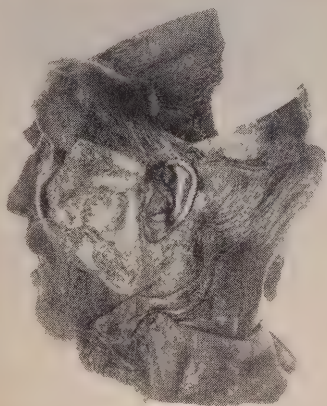


FIGURE 2

The skin removed. The outline of the condyle as it nestles in the mandibular fossa can be noted. Note the angle of the path which the condyle has to travel at this level.



FIGURE 1

Before dissection. The line from the corner of the eye to the tragus of the ear upon which (about $\frac{3}{8}$ inch from the ear) the condyle is located. This is the procedure in some techniques for the location of the condyle. Examination of the shape and direction of the condyle proves that this is fallacious since this point cannot be the axis.

closely we see that there is an inclination like a banked highway for the condyle to make the turn. Another way to describe it would be to call the condyle a roller that wheels in lateral movements. There is less movement, when we move the mandible laterally, on the inner or medial $\frac{1}{4}$ inch than on the outer or lateral $\frac{1}{4}$ inch of the gliding condyle.

Of course, if we move the mandible protrusively both condyles are pulled together. Even then the direction is not in a straight line. The patient may favour one side slightly or the line may zig-zag slightly.

The majority of writers seem to think that we can open the mandible a bit at first before the condyle begins to move forward. The McCollum group seem to be the strongest exponents of that theory. In fact McCollum



FIGURE 3

At the next level. Note the inclination of the condyle path. It is quite shallow.



FIGURE 5

A new inclination again.



FIGURE 4

At this level there is a different inclination again. It is becoming steeper.



FIGURE 6

The condyle path is different again at this depth.

stated that he has seen the mandible open from a half inch to an inch and a half without the condyle moving forward⁹. Higly and Logan¹⁰ did a

series of experiments with a cephalometer and proved that the condyle moved forward with a 2 mm. opening. Those that did not were shown to



FIGURE 7

Again a different path. The condyle path is therefore not the one-angled path one visions when examining an x-ray of the condyle taken laterally or when viewing the calculated path on an articulator.

have tooth interference which probably prevented normal starting points. However, as the opening became larger there was a forward movement on all the condyles. Fifty-eight cases were investigated. That certainly knocked a lot of fancy articulators and face bows towards the rubble heap.

Some investigators pointed out that the condyles pointed towards the foramen magnum. There is a sort of mysticism connected with this fact. This is an illustration of the mechanical approach we have had in the past to denture procedure because attempts have been made to construct articulators because of that fact. Had we recognized the functional laws of nature which embody almost every branch of study, we shouldn't have attempted to standardize mathematically and mechanically, the movements of the jaw. If we forget the mystic approach to the fact that the condyles point at the foramen magnum and

search for a natural cause, we can perhaps see some logical reason. The writer believes that the condyles face in the direction of the pull of the lateral (external) pterygoid muscle. That is caused by function. Examination of a gorilla's skull shows that the condyles point at one another and do not point at the foramen magnum at all. That is perhaps also caused by function.

There are methods of denture construction where the so-called anatomical articulator is not required for obtaining balanced occlusion in the artificial dentures. The writer has outlined such a technique in another article¹¹.

ARRANGEMENT OF TEETH

Dr. H. K. Box has for some years been pointing to the fact that in the wear of the natural teeth wherever they were permitted to wear, as in primitive people's, the lower buccal cusps and the upper lingual cusps of the molars would wear down. This gives the opposite curve from one cheek to the other than we have been taught was normal.

The spherical idea of setting up teeth has prevailed for a long time. It teaches us to set up the posteriors as if the lowers were set against the outside of a sphere and the uppers were sitting inside the sphere. Thus the uppers had the buccal cusps higher than the lingual cusps and the lowers also had the buccal cusps higher than the lingual to meet the upper molars. This is the opposite to the arrangement which is found in primitive people. The writer has examined the teeth of Eskimos and James Bay Indians from impressions of teeth made by Drs. C. H. M. Williams, (Fig. 8), and P. W. Arkel of the University of Toronto, and found the opposite of the spherical theory to be true wherever wear was in evidence. The teeth in the skulls of a Zulu and a Bushman (Fig. 9) show the same arrangement, and even those of the gorilla (Fig. 10)

fall into the same category. Therefore, it seems evident that our method of setting up teeth in the past couldn't have been in keeping with the national path of the mandibular glide.

Dr. Box has also called attention to the fact that the lower third molar did not face buccally, in these worn teeth, as did the first and second molars. The occlusal surface inclined

muscles incline lingually. The direction of muscular pull compels the third molar to line up in the direction of force, which is towards the lingual. The teeth anterior and away from the "power band" of the masseter and medial pterygoid muscles are not subject to that particular direction and measure of force. They also have a wider range of movement.

WHY WE LOSE POWER WITH ARTIFICIAL TEETH

This brings the writer to, what he believes, is a major conclusion regarding the setting of teeth artificially. Only two molars are supplied with the artificial sets. Some clinicians have even advocated leaving off either a bicuspid or a molar to prevent "clicking". Thus our artificial teeth are placed outside the "power bands"! *And we have been wondering why we can't bite with the same force with artificial teeth that we could with our natural ones!* The roots of the natural teeth did not supply the power. It was muscle that pressed the jaws together.

The consequences are something to be reckoned with. Nature atrophies where there is disuse and hypertrophies where there is increased function providing the blood supply or nourishment is adequate. If less pressure is permitted, there will be atrophy of some of the tissues due to disuse. This will be a contributing cause to altered facial appearance and will also cause alterations in the bones involved including the condyle and fossa. It might be argued that the muscles might work harder to meet the greater work required from them. However, there is a different effect upon bone when there is pressure directly upon it or when there is muscular pull upon it¹². In any event there will be an alteration.

The writer therefore advocates the placing of a tooth within the "power band" whether it be a third molar or the second molar after a third bicuspid has been added. Let us find other

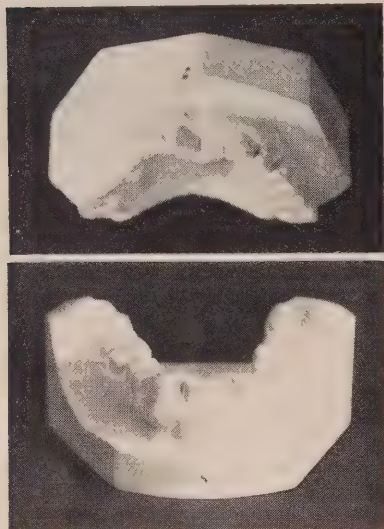


FIGURE 8

Upper and lower models from impressions of an Eskimo woman taken by Dr. C. H. M. Williams of The University of Toronto. Note that the occlusal surfaces of the teeth incline in the opposite direction to the one generally taught in the setting up of teeth. The wear, pressure and direction of the muscle fibres probably all contribute to produce this inclination.

rather lingually. He favoured the idea that the third molar was perhaps a pivot point in the glide of the mandible. This acute observation can perhaps be elaborated upon by a study of anatomy. The third molar is located between the masseter muscle on the outside, and the medial (internal) pterygoid muscle on the inside. These

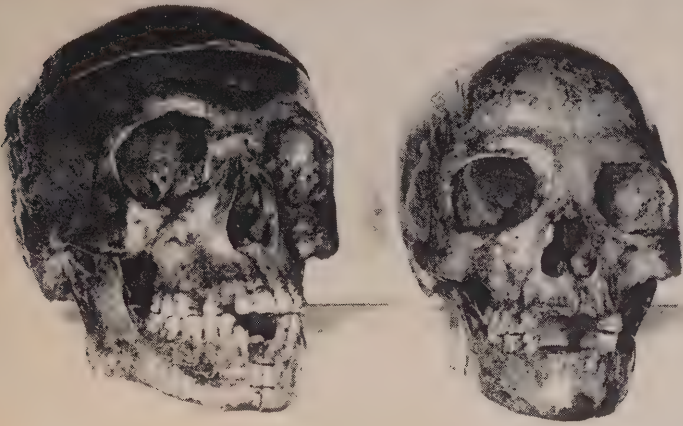


FIGURE 9

Skulls of a Zulu (left) and a Bushman. The wear and arrangement of teeth are similar to that of the Eskimo.

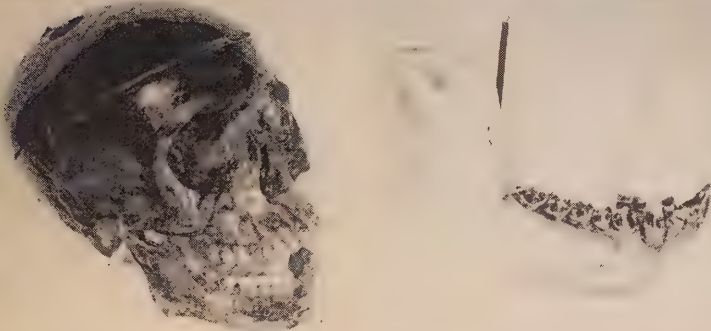


FIGURE 10

The Skull of the Zulu and the Mandible of a Gorilla. Toothpicks have been placed upon the occlusal surfaces to indicate the inclination of the teeth. There is a similarity wherever natural foods induce function and abrasion. Note that third molars incline to the lingual because they are placed within the "power bands."

methods of eliminating "clicking" than leaving a tooth off. In some cases the second molar will normally sit inside

the "power band". These cases probably had no third molar in their natural teeth.

HOW SHOULD TEETH BE ARRANGED?

The writer has been setting up the teeth with the occlusal surfaces of the upper molars and bicuspid inclining lingually and those of the lowers inclining buccally. The idea was to stabilize the lowers. We had been stabilizing the uppers which didn't need it as badly. However, although the idea was, in the main, much more compatible with natural movements than formerly taught, the writer believes that an additional step should now be added in order to give the natural path exactly as induced by the muscles of each individual.

OCCLUSAL PATH

With primitive people, having heavy function the bones in the skull may be different to those of civilized people with lesser function. The palate of an Eskimo is broad and flat while that of a civilized person eating soft foods is often narrow with a deep vault. The occlusal path, therefore, in a civilized person may not be as severe as that of a primitive's. We cannot be arbitrary and state that we shall give the patient a set path. It would be better if the patient provided his own path by rubbing it in his own mouth.

This has been done in various ways before. Christianson was the first one to show it about 1901. Paterson also had the patient rub his own path by rubbing two baseplates on the rims of which were placed a mixture of plaster and carborundum. The technique was advocated in conjunction with the Wadsworth Articulator. In recent years Meyer advocated the method using wax. Dr. Cole of the University of Toronto is advocating a similar method.

All these methods allow the teeth to be set up at an inclination whereby the occlusal surfaces will be touching in all positions of the glide and therefore causing less interference with its consequent trauma.

As a final observation, the writer would like to point out that an Eskimo

whose teeth are worn flat, can certainly mash up the tough meat which is his regular diet. A civilized man can hardly dent some of the Eskimo's food. *The Eskimo's as well as other primitive people's teeth become flat-cusped.* Nature did not necessarily intend that adults shall have cusped teeth. In children the cusps serve the purpose of positioning the opposite teeth until they are in proper relationship.

Flat-cusped teeth in full dentures cause less trauma for several reasons. For one, they do not tend to interfere. A most important reason is that dentures do "settle". As they settle the relationship between the upper and lower dentures is not the same. Therefore, there is cuspal interference accompanying settling, and therefore the ridges will be traumatized.

It is becoming obvious that cusped teeth will soon become as extinct as the Dodo bird.

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THE BRANTFORD FLUORINE EXPERIMENT

by DR. A. GREGOR SMITH, Brantford, Ontario

FOR some weeks the citizens of Brantford have been drinking and using city water to which is being added sodium fluoride in the proportion of 1 P.P.M. (one part per million).

The communal water comes from the Grand River which flows through the city of some 35,000 and previous to this, the water was almost lacking in fluorine.

Dr. W. L. Hutton, city M. H. O. with a special committee appointed by the City Council are largely responsible for starting the experiment but they have had the approval of five representative boards including the City Council.

Grand Rapids, Michigan, also with the idea of reducing the rate of dental caries is farther advanced in the same experiment, and it is being carried on under the auspices of the State of Michigan Board of Health, the United States Health Service and the Dental Department of the University of Michigan.

Here we have the interest and support of the faculty of the Royal College of Dental Surgeons of Ontario. From the Department of Dental Service of the Province of Ontario and from the local dental society has gone a letter to the National Research Council asking for its co-operation.

Newburgh, N.Y., a city about the same size as Brantford, is also engaged in the same experiment. Kingston, N.Y., in the same locality, will continue to use fluorine free water and they have agreed to act as a control in the research experiment.

Stratford, a city lying fifty miles west of Brantford, has for 27 years been using a water supply from deep wells that have a fluorine content of 1.16 P.P.M. From incomplete records

and a preliminary survey it would seem that their caries experience rate is half what it is here. It is intended to make a thorough survey there in the near future so as to establish comparative records for the two cities which are of similar size.

Previous to the time when the addition to the water was made here, Dr. B. W. Linscott, who has been doing the dental work in the schools made a mirror and explorer examination of the teeth of all the children in grades 2 to 8 inclusive numbering 3918, and following which he and Dr. Hutton prepared a series of charts. These charts clearly set out conditions and will be used as comparative records in all similar examinations which will be made each year. They show the D.M.F. (decayed, missing and filled teeth) deciduous and permanent in all children. They show also the difference between continuous residents and those who came here after birth. For continuous residents the D.M.F. is 7.66 per child, 7.4 for permanent teeth, which is twice as high as cities where the water supply contains 1 P.P.M. fluorine naturally, and is three times as high as Colorado Springs where the communal water comes from the water shed of Pike's Peak with a fluorine content of 2.6 P.P.M. The only objection there is that they have a good deal of mottled enamel.

Dr. F. S. McKay in practice at Colorado Springs for some thirty-five years has written several articles in dental publications on fluorine and mottled enamel since he wrote his first paper associated with the late Dr. G. V. Black which appeared in the *Dental Cosmos* in 1916. In a recent article he says "rampant decay is almost unknown in Colorado Springs

and that a surprisingly large proportion of individuals have passed through the 'teen age and into middle life with no decay whatever. The prevailing experience there is to find decay only in occlusal fissures and pits.

At our last meeting of the local dental society Dr. Roy Ellis of the R.C.D.S., Dr. H. J. Hodgins, of the dental service for the Province and Dr. W. L. Hutton were present. Dr. Ellis, after a short talk on some few cases of mottled enamel which Dr. Linscott had picked out, advised a more detailed examination on about a third of the school children. This would bring out small decalcified areas and incipient decay as well as the more apparent cavities. He also suggested that bite wing radiograms be taken in a smaller proportion. It is now the intention to carry out his suggestions. He pointed out that often something unforeseen and of great importance is discovered quite aside from the main object in research work of this kind.

An acidophilus count has been made by Miss Berry, bacteriologist of the R.C.D.S. in 100 cases and it is the intention to make similar counts periodically during the next ten years so as to ascertain the effects of fluorine in this respect. Jay has shown that the acidophilus count in the mouth is markedly lower among fluorine water users as compared with those using fluorine free water.

Dr. Stanley Bagnall's fine article in the June Issue of the Journal of the C.D.A. was of particular interest to the Brantford dentists. It was, of course, rather startling and alarming if as he suggests there may be an accumulation of fluorine as calcium fluoride in the bones. Should this cause an osteosclerosis and interfere with the manufacture of red blood cells resulting in an intractable anaemia it would be serious.

When Dr. Hutton was shown the article, he produced public health reports from the official organ of the

United States Health Service. Here are recorded the researches of McClure and Kinser on the accumulation of fluorine in the body and they definitely bring out the fact that fluorine in the urine is always proportional to the water fluorine up to 5 mg. daily and that fluorine at sub-toxic levels does not accumulate in the body.

The content of fluorine in the maximum human diet exclusive of water and regardless of locality is quite uniform and averages 0.3 to 0.5 m.g. per day. Dr. Bagnall states that up to 3 P.P.M. in drinking water there has been no evidence to show that there is an accumulation so that we should be well within the safety limit here if future researches bear this out.

In Oakley, Idaho, they were at one time getting their water supply from a spring that contained 8 P.P.M. fluorine and in Bauxite, Arkansas the water had 13-14 P.P.M.

In both places all the native children had such a heavy mottling of the enamel that the sources of supply were changed with satisfaction as far as this disfigurement was concerned. It did not mean that any mottled teeth cleared up, but any children born after the change were free of it.

In a table compiled by Drs. Dean Jay, Arnold and Elvove, showing a summary of dental caries findings in 21 cities in 4 different states, it is clearly brought out that where there is a fluorine concentration of 1 P.P.M. or slightly above this amount, that the dental caries experience is less than half as great and in several instances less than one third in comparison with cities where there is only a trace.

Those who started practice in Canada twenty-five or thirty years ago will, I am sure, agree with me that far from controlling dental caries, it is much more rampant now than it was then.

We see a great many more in the teen age or early twenties who are

wearing full dentures or who require extensive or full extractions.

There is now an ever growing demand from the general public that results be shown in the elimination of the most common of all diseases, dental caries, and if the dental profession does not obtain these results the public is going to try some other way.

We have ample evidence of this here in Brantford where the impetus for the fluorine movement, while it has the support of different dental organizations came from sources chiefly outside the profession.

Fluorine, as used here, may not be the full answer for prevention of decay in the teeth but, as one authority states "at present such a project would seem to be the only possible or practical method for mass application of an anti-caries therapy."

It will take some years to prove but from the experience in a great many cities and towns where the communal water contains 1 P.P.M. fluorine we feel assured that our dental caries rate here will be cut at least one third and that those large cavities in deciduous teeth that take the joy out of life for the child, the mother, and the dentist will become, to a great extent, a thing of the past.

The following paragraphs are from parts of a letter received by the writer from Dr. F. S. McKay, Colorado Springs, Col., dated October 10, 1945:

"Your letter came while I was making a tour of the ten district Dental Societies of the State of Iowa speaking on the subject of 'Fluorine and Dental Caries'."

"It is extremely gratifying to know of this project in your city which is one of the first in a movement that I believe will go fast as soon as the facts become generally known."

"Just in the past few days announcements are at hand that Marshall, Texas; and Evanston, Illinois; are about to embark on a similar project and while I was in the latter city recently, we were advised by Dr. John

G. Frisch of Madison, Wisconsin, that not only his own city but some twelve others in that State are just about ready to take a similar step. All these, and the movement in general, has the full co-operation of the State University. I can only view this rapid action as astounding."

"I am pretty much inclined to feel, as your paper puts it, that this movement will receive its chief support from agencies outside dentistry, agencies such as State Health Boards and Municipalities and State Universities, possibly through their Schools of Dentistry. Such institutions in Ontario seem to be extending their full endorsement."

"I note also from your letter that the Dental School at the University of Michigan is supporting the movement. I am convinced, as you are, that the dietary approach to the problem of caries can never reach more than a very few individuals, and that now as never before an attack against the mass occurrence of caries is a desperate need in view of the steady increase in the caries experience."

"One of the most powerful influences in accounting for this is the tremendous commercial interests involved in marketing caries producing foods, confections, drinks, and chewing gum."

"Of course this cannot be prevented as it is next to impossible to educate against the use of these pleasant tasting products and it is my constant observation that in spite of the use of such products and in spite of bad conditions of mouth hygiene the amount of decay remains at a low incidence among users of fluorine water. You will understand that I am not arguing against maintaining an effective mouth hygiene."

"I feel that Dr. Bagnall has pointed out dangers in the use of a fluorinated water that do not in reality exist. We know that there are scores of communities in which fluorine water, in much higher concentrations than 1

P.P.M., has been in use for many years and it would seem that if in these communities there had been any undue prevalence to anaemia, or other injuries that they could not possibly have escaped notice."

"Nothing of this sort is prevalent or at all existent in my own city which has used a 2.6 fluorine water for at least 65 years."

"Also there are some statements in the references to Gottlieb that warrant comment as on page 256 of the June issue of the Journal of the Canadian Dental Association. It is not true that the protective action of fluorine is lost if the person moves from

a fluorine area. This action of fluorine after it has ever been conferred is permanent regardless of where the person may go. A multitude of cases confirm this observation."

"McClure shows that the amount of fluorine ingested is almost entirely excreted via the normal excretory processes."

"Neither is there the loss of teeth through the action of fluorine that is described by Gottlieb on P. 258. From observation I cannot conceive of any damage to any bodily structure through the use of 1 p.p.m. fluorine in a municipal water supply."

Today, due to untimely publicity, many communities are considering the fluorination of their communal water supplies. There is no question, the fluorination of communal water supplies and the ingestion of this water by children during the developmental period of the teeth will, at a later date, reduce the incidence of smooth surface dental caries. However, there are at least two other grave potentialities which must be carefully considered. The first of these is possible toxic effects, the extent of which time alone can determine beyond a shadow of doubt. It is now known that in areas of endemic fluorosis the incidence of periodontoclasia is high and the disease makes its appearance at an early age.

The second factor to be considered is, will the ingestion of fluorinated water have any effect on the fundamental factors which make dental caries possible? There are many reasons why those who believe in the essential unity of the degenerative diseases and that dental caries is a manifestation of such degeneration, feel that the reduction of dental caries by the fluorination of water will mask the basic problems and delay fundamental advances in public health.—Excerpts from Editorial in Dental Items of Interest, Oct., 1945—

"The word 'dental' has come to be associated with the idea of 'mechanical' fillings, extractions, dentures, appliances, devices, etc., but the truth is that the teeth can no more be divorced from the personality of the patient than any other part of the body."

Edward Weiss, M.D., in Philadelphia Medicine

"The speed and drive with which we live in this day and age puts a heavy strain on our hearts. Many a man whose heart goes on strike in the early fifties really sacrifices his life on the altar of ambition. For the person with heart disease, a slower pace is vital. His life need not end, but he must learn to live with his heart."—Hygeia, July, 1945—

ANNOUNCEMENTS

Dominion Dental Council Examination

Dominion Dental Council examinations will be written July 15 to 20, 1946. Class A fees should be in the Secretary's office not later than May 20, and Class D, not later than April 20, 1946.

A. J. BRETT, Regina, Sask., Sec. Treas.

National Convention of Canadian Dentists

A National Convention of Canadian dentists under the auspices of the Canadian Dental Association and the Ontario Dental Association will be held at the Royal York Hotel, Toronto, May 27, 28, 29, 30, 1946.

This is a special effort on the part of Canadian Dentistry to hold a Joint Meeting and it is being made pretty much of a Canadian Convention so will be attended by a great many of our profession across Canada. We also trust that many of our friends in the United States will see their way clear to visit us and to this end we are extending an invitation.

LLOYD M. GROSE

Chairman of Publicity Committee.

Minnesota State Dental Association

This Association's annual meeting will be held in the Municipal Auditorium, Saint Paul, Minnesota, February 25-27, 1946. Copies of Preliminary Program will be sent upon request to the Minnesota State Dental Association, 498 Lowry Medical Arts Building, Saint Paul 2, Minnesota.

Odontological Convention Mexico City

The fifth Odontological Convention will be held in Mexico City from February 18 to 28, 1946.

An official invitation has been received inviting representatives of Canadian dentistry to attend. This invitation is extended to all members of the Canadian Dental Association. Special request is made that official dental bodies appoint representatives to attend. If anyone, who contemplates attending this convention, will forward such information to this office we shall be pleased to advise the proper authorities.

Secretary, Canadian Dental Association, 211 Huron Street, Toronto, Ontario.

CHANGE OF ADDRESS

Notice of change of address should reach the Secretary's office before the first of the month in which the change is to take effect. Please furnish old as well as new address.

Members in the Military Services are requested to notify respecting change of address as quickly as possible so that the *Journal* will be received at new address.

In all cases, the former address should be given.

Address all communications to:

The Secretary,
Canadian Dental Association, 211 Huron Street, Toronto 5.

The Forum

PASSIM

IN THE year 1899 Professor Curie, working with his wife, succeeded in isolating from pitchblende the naturally occurring oxide of uranium, a substance which he called radium. The story of this event is now well established in the minds of the laity and the association of Curie with radium is as familiar to the man-in-the-street as is that of William the Conqueror with the Battle of Hastings. The significance of the discovery is, perhaps, not such common knowledge to him—significance arising from the fact that it represented the first step towards the employment of radioactive energy for the benefit of mankind.

Others following Curie have been able to demonstrate the destructive effect of this energy upon the tumour cell, with the result that an alternative to surgery in the treatment of cancer is now at our disposal, whether we use that alternative either as the method of choice or in cases where frank inoperability dictates its use.

Roentgen has demonstrated how the penetrating power of radioactive energy, in conjunction with a photographic plate, may enable us to view images of the denser structures of the body. In cases of suspected fracture a skiagram of the part concerned has become almost a routine step in the establishment of a sure diagnosis, while with the use of radio-opaque substances we can discover much regarding the state of the bronchi, kidneys, gall-bladder and alimentary canal. Mass radiography, when developed to its fullest extent, will undoubtedly be a factor

of the greatest significance in checking the spread of a disease which, in this country alone, is responsible for many thousands of deaths every year.

The most recent therapeutic application of radiant energy is the intravenous administration of radioactive substances in the treatment of leukaemia. This, although at present in the experimental stage, will, if successful, surely take its place with the rest as yet another weapon in the fight against disease.

All these measures have one clear, common aim. They seek to prolong human life. Their story is one of steady development, each step a link in the chain which stretches back to Curie and to the year 1899....

This year of grace 1945. Because the European War is at an end and because we are only human, we begin slowly to assume that complacent attitude of mind which is the reaction to the strain of war-time existence. We have almost forgotten the "Blitz" and the buzz-bombs, the sirens and the casualty-filled wards; Belsen seems little more than a bad dream.

Then the Atomic Bomb, final link in the chain. With almost frightening suddenness the news of its advent is brought to us in the daily Press and over the wireless. That which to most of us was hazy theory has become hard fact bringing with it, it is true, victory over Japan, but also the realization to us of all its dreadful potentialities. This, surely, is perfection in the science of killing.

One makes no fanciful analogy in

likening the present situation to that existing in an unfinished race in which Destruction has already outpaced its rival, Construction, a lead due solely to the production of the bomb which is as yet unchallenged by any rival counterpart. One does not wish to give the impression of making futile requests for a patent elixir or a cure-for-all-ills. One does, however, ask in

all seriousness: "Who will win? Kill or cure?"

The answer must lie in the attitude taken by us all the world over. In the words of Mr. Churchill: "We must indeed pray that these awful agencies will be made to conduce to peace among the nations, and that...they may become a perennial fountain of world prosperity."—Guy's Hospital Gazette, Aug. 18, 1945.

"THE KING IS DEAD, LONG LIVE THE KING!"

AFTER the vitamins, what? What is there on the horizon likely to take the place of, or at least overshadow the vitamins? We are thinking especially of exploitation of the laity and assuming that the touting of hormones and penicillin, despite the latter's lack of toxicity, will be controlled. Enterprise being what it is a succession can safely be assumed. After the greatest possible clean-up in such matters a decline is naturally to be expected and a new gold mine, yielding \$250,000,000 per annum, must be struck. Along with this phase there is also scientific progress for which, in itself, we are duly grateful.

The amino acids seem to us to offer the most potential possibilities at present; they have the same single or shot-gun availability as the vitamins; a similar magical myth can be conceived of in their case; the concept of the amino acids as the building blocks of which the protein molecule is constructed lends itself marvellously to nutritional and therapeutic wizardry, both real and phony; and since the body proteins differ from each other specifically, the food supply must furnish the particular amino acids necessary for building the specific proteins in the cells, which suggests the possible range of real or alleged deficiencies to be corrected, especially in the field of the chronic degenerative diseases by way of prevention and cure; it will not be many years before

people will wonder how we of today managed to live without large auxiliary supplies of the amino acids as essential elements in our budgets.

There are many signs that the amino acids are in line and pressing forward. The shout will soon go up, we suspect, of "The King is dead, long live the King!"

The populace is familiar with thiamin, riboflavin, ascorbic acid and all the rest of the royal family now reigning. But we must learn to visualize a bank clerk, in 1948, purchasing a bottle of tryptophan capsules with the same assurance as if he were buying Smith's non-carcinogenic cigarettes (another gift reserved by the gods for the near future).

It will be no more of a feat for a public which knows pantothenic acid, alleged banisher of gray hair (of rats!), to familiarize itself with some or all of the new princes and princelets, if our surmise is sound; to wit: tryptopham (crown prince), glycine, alanine, valine, leucine, isoleucine, serine, phenylalanine, tyrosine, threonine, cystine, methionine, aspartic acid, glutamic acid, B-hydroxy glutamic acid, arginine, histidine, lysine, proline, norleucine, and hydroxyproline.

Our super-propagandists will take care of all that when the time comes. Look what the *Reader's Digest* did for testosterone propionate.—Editorial in *Medical Times*, Aug. 1945.



Oh!! So you work in the Income Tax
Department, Hey!!!

First and foremost and, above everything, I place the possession of a second surgery as invaluable to time-saving. The dentist should learn early to work in two surgeries—if not simultaneously—almost so. In the extra room innumerable hours may be saved and utilized to advantage. There all extractions can be done, leaving the patient to rest at leisure after the operation, attended by the nurse, while actual time employed by the dentist will be only a few minutes. If extractions are carried out in the one and only surgery, either the patient must be hurried away or valuable time is lost. In the second surgery the casual patient can be interviewed for a few minutes; there a denture may be eased, a dressing inserted in a painful tooth, a few minutes' consultation allowed, and a variety of other matters attended to while the first surgery is still occupied. Time is wasted or misspent all day by the dentist who is confined to one working room. While a porcelain filling is setting; while elderly ladies are removing layers of coats, ornaments, and spectacles; while younger ones are replacing lost lipstick, the operator is not required and is more usefully employed in his second room. The nurse can well attend to these non-dental performances, arrange further appointments and clear instruments away, leaving the dentist free for more remunerative occupation. —Edward Samson in *Guy's Hospital Gazette*.

A COMPARATIVE STUDY OF THE INFLUENCE OF FLUORIDES IN DRINKING WATER ON DENTAL DECAY

by JOHN G. FRISCH, D.D.S., Madison, Wis.

Condensed from Wisconsin State Dental Journal, Sept. 1945.

Because many progressive communities have become interested in the possibility of controlling the incidence of dental decay by the addition of fluorides to water supplies and because of the special interest in Madison in this regard, the Dane County Dental Society, in cooperation with the Wisconsin State Dental Society, undertake to make a comparative dental caries survey between Madison and Union Grove. Union Grove's water supply contains one part per million of fluorine and its use has been continuous without any relevant changes for the past forty-five years. Madison's water is virtually fluorine free.

1. Permanent teeth of Madison children began to show loss by extraction at 7.

2. Permanent teeth of Union Grove children began to show loss by extraction at 15.

3. Madison children have more than 4 times as many fillings.

4. Madison children have more than 2 times as many cavities.

5. Madison children have almost 9 times as much decay of the upper anteriors.

6. Madison children have about 8 times as many teeth lost by extraction.

7. Madison children have about 3

times as much decay of the 1st molars.

8. Madison females had .09% more decay than the males; Union Grove males had .09% more decay than the females.

9. Madison children have more than three times as much irregularity of the teeth of the type that presumably was caused by early loss of deciduous or permanent teeth and loss of space by decay.

10. Union Grove children had an over all dental decay experience of only 27% as much as Madison children.

This comparative survey is but one of at least twenty-seven others reported in regard to the caries experience of fluoride and non-fluoride areas. Well over 15,000 children were studied in these surveys. In every case it has been found that where 1.0 fluorine parts per million or more has been present in the drinking water there is a substantial reduction in dental caries. Fluorine ingested during the first eight to ten years of life imparts a protection; and according to the reports of McKay, Dentherage and others, there is definite proof that the beneficial influence of fluorine as exerted against the decay process, having once been conferred, remains permanent and is not subject to serious diminution in later life.

DENTAL HISTORY: PATHETIC OR PROPHEPIC?

Condensed from Editorial in Jour. of Am. College of Dentistry, June, 1945.

FOR one reason or another or for many, all of our efforts of the past appear to be misinterpreted in the present. Is it possible that these efforts of the years gone by, and not too long ago either, are being shown to be pathetic rather than prophetic?

Several facts appear to stand out, and which must be seriously considered:

1. We must not allow ourselves to be overcome with an inferiority complex, and so be engulfed within another group. This will weaken den-

tistry in its ministrations, and the public as well as we will suffer.

2. We must not allow ourselves to be overcome with the clinical phase of our total function, thus returning to the dentist of yesterday, who "pulled teeth and made plates."

3. Nor must we succumb to academicians and others who for one reason or another would relegate us to the field of mechanics, to be directed by those who may sit in a swivel chair, without realization from the standpoint of reality of the application of their knowledge.

4. We do not want a pre-dental curriculum identical with that of students of medicine. That is over-crowded now. And how could we handle it? We need our own pre-dental curriculum pointing toward dentistry, so that to a better and still better extent the student of dentistry, even in his pre-dental years will gain some idea of that into which he is coming.

5. Dentistry is not a branch of medical practice. There isn't any point that

can be made establishing the truth of that idea. Dentistry is a HEALTH PROFESSION, along with medicine, sanitation, hygiene, and possibly others. This apparently is overlooked and it is up to us to establish that fact and permanently in the minds of men, including ourselves, first.

6. Finally, we have become careless in that we have allowed certain sciences to be known as "medical sciences". This is not true for these same sciences or studies are used in every and all branches of learning. When one has attained a required goal or level in his studies, or in his acquisition of knowledge, he can go out into the world and put that into practice. This is what happens in every field of service, including medicine and dentistry.

We must be more careful that our past record maintains its *prophetic* direction as our predecessors willed, and not become *pathetic* because of our lack of will.

THE PROBLEM OF THE EXPANDING UNIVERSE

by DR. EDWIN HUBBLE, Mount Wilson Observatory.

(Excerpt from *Science*, Feb. 27, 1942.)

EXPLORATIONS were once confined to the system of the planets. Then, about a century ago, they reached a few of the nearest stars, and, thereafter, ranged through the stellar system. Finally, in our own times, the explorations pushed beyond the stars and swept through the realm of the nebulae, out to the extreme limits of the telescopes. Today we study a volume of space so vast and so homogeneous that it may represent a fair sample of the universe.

The observable region is a sphere about 1,000 million light years* in diameter, throughout which are scattered 100 million nebulae, each a stellar system, comparable with our own system of the Milky Way. These nebulae average about 100 million times

brighter than the sun, and several thousand million times more massive. The nebulae are scattered singly, in groups and in clusters but, when large volumes of space are compared, these minor irregularities are not important. On the grand scale, our sample of the universe is approximately homogeneous—very much the same everywhere and in all directions. The smoothed-out average distance between neighbouring nebulae is about two million light years, and the intervening space is sensibly transparent.

*A light year is the distance over which light can travel in a year's time. It is used as a unit in expressing stellar distances. It is more than 63,000 times as great as the distance from the earth to the sun.—Ed.

THE DENTIST AND THE LAW

THE legal position of the dentist as it stands today is explained by Surgeon Lieut. (D) D. M. Paterson, R.N.V.R., B.D.S., Lond., barrister-at-law, in the *British Dental Journal*. Here are some of his points:

THE CONTRACT

When the patient is paying the dentist a fee, in the eyes of the law they make a contract, whereby the dentist undertakes to perform certain professional services in return for his fee.

Having once commenced treatment, he must go on until he can do no more or until the patient ends the contract by refusing to attend further, or the dentist himself decides to withdraw for some good and sufficient reason. A quarrel with the patient would be a good reason, or lack of essential co-operation by the patient, or refusal to pay his fee. In such a case, his duty is to do his best to ensure that the patient is not injured by his withdrawal. He will usually do this by advising the patient to consult another practitioner, and by offering to meet his successor in consultation if necessary.

THE PATIENT'S CONSENT

Everyone knows that it is an assault and battery to treat a person without his consent, or to treat a person under 21 without the consent of his parent or guardian. Battery is the actual touching of a person against his will, but an assault can be committed without actually laying hands on the patient. It is enough if the dentist causes him to fear on reasonable grounds that he is about to do something in spite of his protests and against his will. Thus to approach a patient with a hypodermic syringe when he had refused to have an injection would be a technical assault.

The question of consent is very important when a general anaesthetic is to be given, for once the operation has begun the dentist cannot obtain the patient's consent to any further mea-

sures which may become necessary. Accordingly, he should always protect himself by explaining to the patient in simple language what he intends to do, and the possibility of having to do more. If the patient then raises no objection the law will assume that he was prepared to leave any further measures to the discretion of the operator.

"REASONABLE CARE AND SKILL"

When the dentist undertakes any given treatment, his legal duty to the patient is to use "reasonable care and skill" in carrying it out. If he fails to do so he is guilty of negligence, or, as it is often called, malpractice, and he can then claim no fee from the patient and is liable to pay damages.

In deciding whether the dentist has used "reasonable care and skill" in treating the patient the court acts on common-sense principles, aided by the evidence which may be laid before it by acknowledged experts. It will take into consideration the difficulties encountered in the diagnosis and treatment, and then ask itself the question "Has this practitioner met those difficulties with the ordinary care and skill which would be expected from any other practitioner of the same standing in his profession?" If so, he has done all that the law requires him to do.

Thus the law is not ungenerous to the dentist in the standards which it requires of him. But there is one further privilege which it gives to the professional man and which operates most powerfully in his protection. In any action for negligence which is brought against a dentist the court will assume at the outset that he has not been negligent and the burden of proving otherwise is entirely upon the patient.

LINE TO TAKE IN ACCIDENTS

It is of the utmost importance for the practitioner who has been unlucky enough to have an accident not to do or say anything which may be construed as an admission however much natura-

sympathy he may feel for the patient. His correct course is to advise the patient quietly of what has occurred and at the same time his duty is to take every possible precaution to avoid further ill-effects, if necessary getting in touch with the patient's doctor. The golden rule is to say as little as possible. Lengthy statements or letters of explanation are dangerous. They have little effect at the time, but they may be of the greatest consequence at the hearing in court, especially to opposing counsel, giving him excellent material for cross-examination.

When a dentist receives a letter charging him with negligence he should never ignore it nor delay to answer it, but should refer it to his protection society or solicitor at once. Delay is often interpreted as a sign of weakness, whereas a prompt and firm reply denying liability will often "kill" an ill-founded action at the outset.

RIGHT TO FEE

The dentist is entitled in law to reasonable remuneration for his work. If a definite fee has been agreed upon beforehand, he is entitled to this amount, and can recover it by action. But if, as often happens in private practice, no fee is mentioned, the dentist is not necessarily entitled to the fee he asks, but only to such fee as the court considers reasonable, having regard to the eminence of the practitioner, the amount of work done, and the cost of materials used. So if the patient likes to dispute the amount, the dentist may find himself obliged to choose between accepting the decision of a court or cutting his losses by taking a smaller amount.

ADMINISTRATION OF ANAESTHETICS

There is nothing in law to prevent anyone acting as an anaesthetist at a dental operation, and the dentist is quite entitled to use his secretary, or

even his chauffeur, to assist him for this purpose. But if he does he should remember that the law will hold him absolutely responsible for any mistakes they make. By acting alone, or with an unqualified assistant, the dentist undertakes a heavy legal responsibility, for he assumes the burden of acting with competent skill and care in both capacities. Accordingly, he must have all the necessary apparatus and drugs to hand, and be prepared to use them in a competent manner. Claims arising out of the single-handed administration of general anaesthetics are more common than might be imagined.

DENTURE DISPUTES

The most usual source of litigation in dental practice is the denture for which payment is refused on the ground that it does not fit.

A recent decision of the Court of Appeal has laid it down that a dentist, when he undertakes to make a denture impliedly promises the patient that the finished article will be reasonably fit for the purpose for which it is intended, namely, eating and speaking. In order to protect himself, therefore, when he has to deal with a difficult mouth for which it may not be possible to make such a denture, or where there is a history of previous unsuccessful dentures, the practitioner is advised to inform the patient beforehand that he cannot guarantee a perfect result, and that all he can do is to use his skill to do the best he can. If the patient then agrees to have the denture made on these terms, the dentist is protected, and can sue for his fee, even though the result is not perfect.

RECORDS

It is a great mistake not to keep adequate records of all cases, for the minor and apparently uneventful case is usually just the one that causes trouble.—*D. Mag. and Oral Topics.*

Failure is the foundation of success and the means by which it is achieved —
Laotze.



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Editorials

C.D.A. MEMORIAL FUND

The Canadian Dental Association is undertaking the establishment of a War Memorial Fund to honour the memory of those members of the dental profession who lost their lives in the service of their country in the Great Wars.

The money received will be set up as a trust fund to be known as The War Memorial Scholarship Fund. The income from the Fund is to be used for the purpose of establishing scholarships which are to be made available to students in attendance at Canadian Dental Schools.

It goes without saying that we all appreciate greatly the service rendered our country by those members of our profession who gave up home and practice in order that liberty might still prevail in the world. However, it is to the members of the families of those of our members who made the supreme sacrifice that our hearts go out at this time and we would do something to commemorate the lives of these departed confrères.

Very soon all members of the Canadian Dental Association will receive an appeal from the provincial members of the Memorial Committee to subscribe to this most worthy fund and we are sure that the Committee will not be disappointed in their undertaking.

This is a case where our individual efforts are required if we are to accomplish anything worthwhile.

You who read this article may not know anyone personally in the dental profession who has suffered the loss of loved ones in the war but your liberality at this time will help you as well as Canadian Dentistry just the same. Emerson said, "It never troubles the sun that some of his rays fall wide and vain into ungrateful space, and only a small part on the reflecting planet. Thou art enlarged by thy own shining" so let us all become aware that this is a social responsibility recognized by dentists everywhere, recognized and enforced by the higher law of God: "Thou shalt love thy neighbour as thyself."

—M. H. G.

THE MOUTH AS PART OF THE BODY

In a recent Dominion Dental Council examination, one question on the prosthetic dentistry paper reads as follows: "A patient is referred to you for consultation. You find, on examination, that the patient has an unsatisfactory lower denture. There is an area of inflammation and swelling which extends from below the right buccal flange slightly into the cheek. What action would you take?"

The examiner, Dr. J. Stanley Bagnall, of Halifax, Nova Scotia, states that there is a certain amount of camouflage about the question, which however, should not obscure the issue if the dentist is thinking about his problem. In answering this question, the candidates outlined the usual method of treatment, including relief of the denture edge, checking the occlusion and even suggesting a rebase. These were all correct in so far as they went but the examiner wanted to see how many would mention that the swelling might be due to a pathological condition and how many would suggest that if prompt healing did not follow the customary methods of relieving the denture, what steps should be taken. The examiner states that there were forty-eight candidates and of those, forty-four thought only in terms of mechanical dentistry. He states further that it is likely that some of these forty-four would become suspicious in due course, if the lesion did not heal but that the general response only goes to show that there is a lot to be done to get the dentist to see beyond the dental tissues and structures.

Two of the candidates were "D" men, meaning that they had been in practice for at least ten years; both only saw the denture. When will the average student and the average dentist consider the mouth as part of the body?

M. H. G.

Great men are like meteors which shine and consume themselves to enlighten the earth.—Napoleon.

DENTAL CORPS NEWS

SUPPLEMENTARY LIST OF CANADIAN DENTAL CORPS OFFICERS AS OF DEC. 3, 1945

APPOINTMENTS

Rank, Name and Date	Civilian Address
Lieut. B. C. Friesen, 15-9-45	Winkler, Man.
Lieut. C. C. Harrison, 15-9-45	Evesham, Sask.
Lieut. B. W. Matkin, 15-9-45	Edmonton, Alta.
Lieut. A. A. Olsen, 15-9-45	Edmonton, Alta.
Lieut. J. H. Jones, 15-9-45	McLennan, Alta.
Lieut. B. W. MacKay, 15-9-45	Edmonton, Alta.

RETIREMENTS

Rank, Name and Date	Civilian Address
Major P. G. M. Thompson, 19-9-45	North Devon, N.B.
Major H. N. MacKinnon, 15-9-45	Quebec, P.Q.
Major R. Lavallee, 24-9-45	Montreal, P.Q.
Major T. I. Guilford, 1-10-45	Montreal, P.Q.
Major R. E. McMahon, 14-9-45	Lachine, P.Q.
Major G. M. Tremblay, 20-9-45	Quebec, P.Q.
Capt. F. L. Hebert, 25-9-45	Baie Comeau, P.Q.
Lt.-Col. I. W. Hamilton, 18-9-45	Kingston, Ont.
Major C. A. Rudell, 16-9-45	London, Ont.
Major E. M. Honey, 15-9-45	Richmond Hill, Ont.
Lt.-Col. J. A. Natress, 18-9-45	Toronto, Ont.
Major C. C. Mabey, 21-9-45	Gananoque, Ont.
Major J. C. Green, 27-9-45	Peterborough, Ont.
Capt. L. G. Richardson, 25-9-45	Toronto, Ont.
Major J. W. Bartholomew, 6-10-45	Hamilton, Ont.
Major L. H. Holmes, 28-9-45	Toronto, Ont.
Major G. Johnston, 25-9-45	Aylmer, Ont.
Major A. E. Hobden, 28-9-45	Orillia, Ont.
Major J. S. Wilkinson, 8-8-45	Toronto, Ont.
Major C. R. Collard, 26-9-45	Trenton, Ont.
Major D. M. Tanner, 1-9-45	Toronto, Ont.
Major G. E. Harper, 13-10-45	Waterloo, Ont.
Major J. M. Campbell, 2-10-45	Gatham, Ont.
Major C. W. Hamilton, 9-10-45	Stratford, Ont.
Capt. G. W. Cornell, 2-10-45	Chatham, Ont.
Capt. G. Neptune, 1-10-45	Winnipeg, Man.
Major C. C. Graham, 10-10-45	Russell, Man.
Capt. V. A. Clark, 31-7-45	Saskatoon, Sask.
Capt. S. L. Oliver, 27-9-45	Saskatoon, Sask.
Lt.-Col. H. K. Brown, 20-9-45	Barrhead, Alta.
Major H. C. Liesemer, 26-9-45	Edmonton, Alta.
Major R. T. Shillington, 10-10-45	Calgary, Alta.
Major W. S. Murray, 8-9-45	Tabe, Alta.
Major H. A. Dowler, 28-9-45	Veteran, Alta.
Major W. R. Stuart, 2-10-45	Edmonton, Alta.
Major K. B. Thurston, 11-10-45	Edmonton, Alta.
Capt. L. G. Grady, 14-9-45	Vancouver, B.C.
Major L. I. Duffy, 25-10-45	Charlottetown, P.E.I.
Capt. E. M. Bourgeois, 20-10-45	Moncton, N.B.
Major P. M. Clarke, 11-10-45	Harvey, N.B.
Major L. M. Callbeck, 27-10-45	Halifax, N.S.
Major M. Clamer, 23-10-45	New Waterford, N.S.
Capt. V. F. Clifford, 11-10-45	North Sydney, N.S.
Lt.-Col. H. S. Crosby, 13-10-45	Halifax, N.S.
Capt. L. G. Israel, 3-11-45	Sydney, N.S.
Capt. G. K. MacInloch, 1-11-45	Halifax, N.S.
Major G. B. Richmond, 31-10-45	Sydney, N.S.
Capt. A. R. Smith, 27-10-45	Halifax, N.S.
Major R. H. Stanford, 11-10-45	Dartmouth, N.S.
Major O. C. Taylor, 24-10-45	Glace Bay, N.S.
Lt.-Col. J. W. Abraham, 13-10-45	Montreal, P.Q.
Major E. Beaulieu, 18-10-45	Quebec, P.Q.
Capt. J. M. Chamard, 29-10-45	Montreal, P.Q.
Capt. R. Cholette, 10-9-45	Montreal, P.Q.
Capt. A. J. Decarie, 5-11-45	Montreal, P.Q.
Major L. S. Epstein, 2-11-45	Montreal, P.Q.
Capt. E. Gaboury, 2-11-45	Montreal, P.Q.
Major W. D. Grant, 12-10-45	Hull, P.Q.
Major R. T. Lamb, 29-10-45	Montreal, P.Q.
Lt.-Col. J. F. Lantier, 31-10-45	Montreal, P.Q.
Lt.-Col. O. A. Lefebvre, 2-11-45	Montreal, P.Q.
Major A. Moisan, 24-10-45	Quebec, P.Q.
Capt. F. C. Thompson, 26-10-45	Montreal, P.Q.
Capt. J. Toplitsky, 29-10-45	Montreal, P.Q.
Capt. G. E. Vanasse, 22-10-45	Abord-a-Plouffe, P.Q.
Capt. H. S. Allen, 3-10-45	Warkworth, Ont.
Major H. N. Beach, 2-10-45	Pembroke, Ont.
Lt.-Col. A. A. Boyd, 26-10-45	Sudbury, Ont.
Capt. R. T. Broadworth, 20-10-45	Toronto, Ont.
Major J. D. Brown, 1-11-45	Hamilton, Ont.
Major A. M. Clark, 16-10-45	Kingston, Ont.

Rank, Name and Date

Civilian Address

Major C. I. Cobourn, 2-11-45	Toronto, Ont.
Major G. I. Creasy, 31-10-45	Neepawa, Ont.
Capt. J. A. Dean, 26-10-45	Kenora, Ont.
Capt. J. R. Edmunds, 27-10-45	St. George, Ont.
Major H. J. Fahey, 26-10-45	London, Ont.
Major A. Gardiner, 8-11-45	Sarnia, Ont.
Major W. R. Godard, 31-10-45	Caledonia, Ont.
Major N. T. Godfrey, 30-10-45	Ottawa, Ont.
Capt. J. Gourlay, 26-10-45	Toronto, Ont.
Major H. E. Gourlie, 26-10-45	Toronto, Ont.
Major H. S. Grey, 6-11-45	Toronto, Ont.
Capt. S. G. Haight, 13-10-45	Toronto, Ont.
Major N. J. Hiscox, 2-11-45	Mitchel, Ont.
Major A. W. Irwin, 1-11-45	Wingham, Ont.
Major S. M. James, 8-11-45	Toronto, Ont.
Major B. R. Jones, 23-10-45	Toronto, Ont.
Capt. H. M. Katzenmeir, 19-10-45	New Hamburg, Ont.
Capt. M. P. Kutney, 26-10-45	Toronto, Ont.
Capt. A. Lieberman, 23-10-45	Toronto, Ont.
Capt. C. Lloyd-Jones, 30-10-45	Toronto, Ont.
Major R. W. Matchett, 2-11-45	Toronto, Ont.
Major J. A. Milne, 23-10-45	London, Ont.
Capt. R. J. Moore, 6-10-45	Smith's Falls, Ont.
Major W. M. Montgomery, 10-10-45	Kingsville, Ont.
Capt. G. M. Morrow, 7-11-45	Hamilton, Ont.
Lt.-Col. H. A. McClean, 23-10-45	Mimico, Ont.
Capt. F. W. McDowell, 27-10-45	Alliston, Ont.
Capt. J. R. McLachlin, 24-10-45	Hamilton, Ont.
Major M. R. McNeill, 30-10-45	Aylmer West, Ont.
Major P. Pearen, 16-10-45	Acton, Ont.
Capt. T. C. Peterson, 31-10-45	Waterloo, Ont.
Major J. F. Porter, 8-11-45	Toronto, Ont.
Capt. M. L. Pratt, 16-10-45	Manotick, Ont.
Capt. E. F. Ranger, 1-11-45	Ottawa, Ont.
Capt. L. J. Saunders, 3-10-45	Toronto, Ont.
Lieut. J. D. Scarfone, 22-11-45	Windsor, Ont.
Major W. H. Smith, 4-10-45	Ottawa, Ont.
Lt.-Col. E. F. Stewart, 9-10-45	Ottawa, Ont.
Capt. G. E. Teal, 1-11-45	Ridgeway, Ont.
Capt. J. L. Walsh, 2-11-45	Kingston, Ont.
Capt. W. A. Weir, 13-10-45	Toronto, Ont.
Major H. L. Windrim, 26-10-45	London, Ont.
Major K. Zinkann, 25-10-45	Kitchener, Ont.
Major A. J. Gardner, 12-10-45	Winnipeg, Man.
Capt. S. Goodman, 17-10-45	Winnipeg, Man.
Capt. A. A. Rabinovitch, 27-10-45	Winnipeg, Man.
Capt. R. P. Shepherd, 26-10-45	Winnipeg, Man.
Major D. R. Stewart, 27-8-45	Transcona, Man.
Capt. E. D. Stinson, 29-10-45	East Kildonan, Man.
Capt. J. T. Cairns, 8-11-45	North Battleford, Sask.
Capt. A. B. Handelman, 23-10-45	Eston, Sask.
Capt. V. M. Jackman, 25-10-45	Strasbourg, Sask.
Capt. J. G. Johnston, 24-10-45	Milestone, Sask.
Major A. Mintz, 10-11-45	Regina, Sask.
Capt. J. Naimark, 17-10-45	Leader, Sask.
Capt. J. W. Neilson, 17-10-45	Saskatoon, Sask.
Major J. J. Schacter, 29-10-45	Saskatoon, Sask.
Major K. C. Wasson, 19-10-45	North Battleford, Sask.
Major A. C. Ahrens, 23-10-45	Lethbridge, Alta.
Major R. W. Bradley, 31-8-45	Edmonton, Alta.
Major H. L. Caldwell, 23-10-45	Calgary, Alta.
Capt. J. E. Carson, 31-10-45	Lethbridge, Alta.
Major R. S. Decker, 27-10-45	Edmonton, Alta.
Capt. J. E. Hood, 20-10-45	Calgary, Alta.
Col. L. V. Jones, 19-10-45	Edmonton, Alta.
Capt. B. Johnson, 16-10-45	Calgary, Alta.
Major C. M. Johnson, 17-10-45	Calgary, Alta.
Major F. M. Murray, 18-10-45	Calgary, Alta.
Major R. A. McEwen, 20-10-45	Edmonton, Alta.
Major G. H. Page, 24-10-45	Rocky Mt. House, Alta.
Capt. A. B. Porter, 17-10-45	Calgary, Alta.
Capt. G. R. Brebber, 25-10-45	Nanaimo, B.C.
Capt. F. A. Butler, 25-10-45	Mission, B.C.
Major F. M. Corbett, 20-10-45	Victoria, B.C.
Capt. A. J. Dorman, 25-10-45	Saanichton, B.C.
Capt. F. W. Dyer, 28-9-45	Vancouver, B.C.
Major C. M. French, 24-10-45	Vancouver, B.C.
Capt. J. G. Hobson, 19-10-45	Vancouver, B.C.
Major H. J. Hocking, 27-10-45	Prince George, B.C.
Major C. B. Lundahl, 27-10-45	Vancouver, B.C.
Major W. R. Loudon, 17-10-45	Vancouver, B.C.
Major W. L. Osterhout, 16-10-45	Vancouver, B.C.
Lieut. W. A. T. Salter, 31-10-45	Victoria, B.C.

CANADIAN DENTAL ASSOCIATION NEWS

APPOINTMENT:

Chief Division of Dental Health Department of National Health and Welfare

Dr. L. V. Janes of Edmonton, Alberta, has been appointed Chief, Division of Dental Health as of December 6, 1945.

Dr. Janes was graduated from the Chicago College of Dental Surgery in 1914. He served in the C. A. D. C. for three years and eight months during the war of 1914-18 and joined the Canadian Dental Corps September 1, 1939, serving until his recent retirement. He became Overseas Deputy Director of Dental Services, a position he occupied for three years preceding his retirement.

C.D.A. Officers' Western Trip

Dr. Harvey Reid, accompanied by the Secretary, Dr. Don Gullett, paid visits at Regina, Lethbridge, Calgary, Vancouver, Victoria, Edmonton, Saskatoon and Winnipeg during November. The meetings were enthusiastically attended at all centres. The following excerpts are taken from the President's address at the various meetings:

"The Number One problem of our Association is to assist our returned men to establish or re-establish themselves in Civilian Life."

"Your Association has made repeated representations to the proper authorities asking for some priority for returning dentists in procuring offices in which wiring, plumbing, etc., is already installed. We have been assured that no blanket priority can be granted but we have the assurance that each case will be dealt with individually and every assistance given."

"There has been a change in policy on the part of the Department of Veterans' Affairs in that Military Personnel on discharge from the forces are being sent for dental treatment to retired Dental Officers who have returned to civilian practice. Now I realize fully the difficulties in this procedure but I would remind you (1) that after the last war the same procedure was followed; (2) that this is a practical type of rehabilitation—it places work and funds in the hands of the man who is return-

ing to civilian life. I would sincerely ask that you lend your support to this effort. Surely no one would want us accused of selfishness and hypocrisy toward our returning veterans. After the last war we were so prone to forget—**WE MUST NOT FORGET THIS TIME!**"

"I would like to make some observations as to the position of the Profession as to personnel. There is at the present moment, in Canada, the largest registration in history. During the war there has been an increase of 9%—the only country in the world to show an increase. The enrollment in all the schools is large with even larger classes to be accommodated next year and the following year. Very few of the students enrolled this year are from the C.D.C.—in fact the very large proportion are from the R.C.A.F. We know that there are a large number in the C.D.C. who have the necessary qualifications to enter and who intend to take up the study of Dentistry. There is of course the regular supply of students finishing High School. It is readily apparent that there is a large supply of potential students."

"It is my considered opinion that when our men from the services and those being trained are absorbed into civilian practice, the picture will be entirely different from what it is today."

"Most of you are aware that the C.D.A. was successful in having formed in the National Research Council at Ottawa an Associate Committee on Dental Research. I forecast some splendid results in a field in which we have been unfortunately weak."

"You have or will in the next few days receive from the Bureau of Statistics at Ottawa, a questionnaire which you are asked to fill out giving details of your income over the past stated years. May I bring to your attention the following facts—the Bureau was going to make this survey whether the C.D.A. co-operated or not—your Association guarantees that every return to the Bureau will be anonymous. It is tremendously important that these figures be accurate so that representatives of the profession have figures that represent the true income of dentists, when approaching representatives of the government."

"You may have noticed in the C.D.A.

Journal that there will be a Joint Convention of the C.D.A. and O.D.A. in Toronto next May. This is a Joint Convention in every sense of the word. It will be an All-Canadian program with essayists and clinicians from every Province in the Dominion. We have the material and we shall try to arrange it to the best advantage. We are featuring a big home-coming reception at Hart House for the men from the forces and their wives and to which you are all invited."

"Our National Association has grown rapidly in prestige and importance in the past few years and I believe that this increase in stature is appreciated more in Government circles in Ottawa, than perhaps any place else."

"As an Association, just as an individual, we must prove our worth and I submit that the Association has proved its worth and shown that it is a definitely and absolutely necessary part of our national dental life. We can and must now ask for greater financial support that we may branch out with further activities that are the responsibility of the National body."

National Health Insurance

The following news clipping perhaps summarizes the comments as contained in the newspapers pertaining to the Dominion Pro-

vincial Conference held in Ottawa, November 26-29, 1945:

Ottawa, Nov. 29, 1945

"Possibility that the national health insurance plan sponsored by the federal government may be dropped for the time being appears to be developing at the dominion-provincial committee meeting here.

If action on national health insurance is suspended it would be a compromise move to secure agreement on the larger economic proposals before the dominion and provincial premiers and cabinet ministers in session here now. These include withdrawal by the provinces from corporation, income and succession duty tax fields.

Ontario is the spearhead of opposition to immediate adoption of national health insurance. Some other provinces are supporting Hon. Leslie Frost, Ontario provincial treasurer in his protests on the matter.

Provinces against immediate action on national health insurance say they do not want to incur the expense it would entail until they have a clearer picture of post-war economic conditions. The Dominion is reluctant to postpone the plan, but may have to do so to secure provincial cooperation on its main plans for a more orderly dominion-provincial economic pattern."

NEWS FROM THE PROVINCES

MANITOBA

The Winnipeg Dental Society

The December meeting of the Winnipeg Dental Society held in the Club Rooms of the Medical Arts Bldg., and presided over by the president of the Society, Dr. P. H. B. Wood, was most unusual. Three members of the profession, recently returned from overseas service, related experiences received in several theatres of war including North Africa, Sicily, Italy and Hong Kong. They were listened to by the large audience with rapt attention because this was something real. When men are engaged in the business of doing their part of capturing or killing human enemies and possibly dying in the attempt, one faces reality indeed.

The Mediterranean experiences were told with a seasoning of humour, but there could be little or no humour connected with the prisoner of war episode at Hong Kong. The horrors of Japanese prison camps are by now too well known to be retailed here. Two western dentists, Dr. Cunningham from Souris and Dr. Spence from Fort William, survived their experiences. It was the latter who spoke about them at this meeting. Rice for food was issued so continuously that at last shoe dubbin added to it to change the flavour seemed welcome. Fried grasshoppers, beetles and other insects, rats and snakes were consumed by those who lived to come back. Those who couldn't stomach it didn't return. Epidemics of diphtheria broke out among the men; hundreds of cases; no toxoid; men with

'dip' membrane covering all the oral tissues almost half an inch thick coming into the dental chair begging for relief. All the dentist could do was to scrape some of it off and perhaps dust some iodoform powder on the raw bleeding surfaces. The powder didn't last long.

The North Africa experience was presented by Dr. Orwell Brown of Winnipeg. The approach to the African coast was delightful because of the terraced green mountain sides with the pastel shades of the residences and other buildings, so beautiful that it invited a closer inspection. But, alas, distance in this instance really lent enchantment to the view until the olfactory organs began functioning and hastily, though regretfully, pastel shades were forgotten. If there was any colour thought of it must have been "purple". After disembarking, Dr. Brown's convoy took to the roads and ended up at Bizerte. He gave great praise to the Canadian Motor Transport including vehicles and drivers for the way they stayed right side up on the wet, slippery mountainous roads arriving at their destination without a mishap.

Dr. S. E. Greenberg, also of Winnipeg, began his Mediterranean adventure with a disillusionment. He had often seen the Rock of Gibraltar in pictures with Prudential Life painted across its face, but when he saw it from the transport decks somebody had wiped the name off. However he soon forgot that because the enemy planes dropped some well aimed eggs sinking some vessels with all the equipment and when they got their feet on terra firma, Sicily to be exact, the dust, bad smells, turmoil and shortages of one article after another seemed as Si put it "Not too Bad". They had a rough, tough time in this Isle and worse in Italy but Si casually brushed it off with "Not too bad". We guess that Canada looks pretty good to all of them, even if office space is not obtainable at present.

Winnipeg Dental Nurses' and Assistants' Association

This Association's annual Christmas meeting was held on December 3. The December meeting is always an informal meeting to which the members are welcome to bring a

friend. It was decided to accept Mrs. Marian Edwards' suggestion that we start a birthday box. The funds collected are to be used for the Canadian Association. The Christmas parcels, which the girls had prepared for the ex-service men at Ninette, were brought to the meeting and were then mailed. After the brief business meeting the members and their friends enjoyed a social evening under the direction of Martha Livingston, the social convener.

ONTARIO

Toronto Ladies' Auxiliary

Mrs. Robert H. Matchett presided at the very successful November luncheon meeting at the Royal York Hotel. Mrs. H. M. Aitken, who recently made an intensive study of Post War Conditions in Europe, addressed the members on this subject. Mrs. Fred J. Conboy introduced the speaker and Mrs. H. R. Skilling graciously thanked her and asked Mrs. Aitken to accept a small gift as a token of esteem and appreciation.

Mrs. Fred Mallory, formerly of London, England, who is now residing in Toronto was warmly welcomed. She was the guest of Mrs. Andrew J. McDonagh.

The officers and conveners of the various committees presented satisfactory reports during the business session. One outstanding report was that of Mrs. Edmund T. Guest, original Chairman of the Scrap Gold Committee. This project started early in the War has raised \$3,230.46. This undertaking involved countless letters and personal calls made by the Committee on more than 500 dentists. With their co-operation, patients responded to the opportunity of donating small pieces of dental scrap gold.

LILLIAN E. CONBOY.

Class '21 Reunion Dinner

Plans are taking form for the quarter century reunion of 2T1 Class during the Convention of Canadian dentists in Toronto next May. Dr. Gordon Millen, M.L.A., is chairman of the committee on arrangements with A. O. Derbyshire as Secretary and R. E. Johnston of 1808 Gerrard St. E., as Treasurer.

In due course each member of the class will hear from "Derby" and do not fail to reply "yes" you are coming.

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Class of '41

There will be a reunion during the National Convention of Canadian dentists in Toronto, next May. Please communicate with me if you are able to attend and forward suggestions for a suitable program.

JOSEPH F. COONEY, Sec.-Tres., Class '41.

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Dental Survey of Pickering Township

Dr. Stanley J. Phillips, director of the Board of the Royal College of Dental Surgeons of Ontario, reports the completion of this survey project by members of the Durham—Ontario Dental Association. Officers of the association are: President, Dr. H. T. Fallaise, Pickering; Vice-Pres., Dr. D. H. Walden, Port Hope; and Secy.-Treas., Dr. R. E. Cox, Oshawa; Those dentists who contributed their services are: Dr.'s Fallaise, Cox, Metcalfe, Detlor, Brock, Gifford, Rodgers and Phillips.

The survey was made possible through the assistance of Mrs. Jean Rhoten, Public Health Nurse, and with the co-operation of Reeve Annis and his council, Dr. M. F. Tomlinson, M.O.H., Inspector of schools, and teachers in the district, and Mr. L. T. Johnston, Township Clerk. The municipality is comprised of 74,674 acres, has an assessment of \$4,100,-491.10 and has a total of 21 primary schools.

There were:

- 1010 children on the school register,
- 925 children examined,
- 165 (17.6%) children without defects
- 335 (36%) children who had previous dental treatment.

3397 was the grand total of dental defects—2550 were classified as cavities and 847 as extractions. 3.7 defects was the approximate average per child including all ages.

This survey was done gratuitously by the above mentioned dentists as a public health effort in this municipality. It is another demonstration of the need for dental care for children so often neglected by parents for various reasons. Regular examination of children's teeth by a dentist at least once each year would bring the child's dental needs

home to the parent and without doubt better dental health among children would result.

T. R. M.

•
Hamilton Dental Association

The Association's third meeting of the year took place on December 5. Our genial president, Dr. Wallace Baxter occupied the chair. The guest speaker for the evening was Dr. Dwight C. Ensign of the Arthritis Clinic of the Henry Ford Hospital, Detroit, who was introduced by Dr. Fred Williamson. Dr. Ensign's topic was "Chronic Focal Infection; Its Status To-Day". Dr. H. M. Morrow capably thanked Dr. Ensign for his excellent presentation."

H. J. TOTTON, D.D.S., Secy.

QUEBEC

Dr. Mowry Honoured

Dr. Prescott Mowry, Professor of Periodontia on the Faculty of Dentistry at McGill University has been appointed a Fellow of the American College of Dentists, an honour reserved for those making notable contributions to Dentistry or to educational work in the field of dental art.

Born in Massachusetts, U.S.A., at an early age he moved with his parents to Quebec, where he received his education in the company of French Canadian children, a fact which is largely responsible for his sympathetic appreciation of French culture.

Immediately upon graduation (with distinction) from McGill University, he entered upon special study of that important branch of dentistry "Periodontia", to which he has made a notable contribution.

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Montreal Dental Club

A meeting of this Club was held at the Mount Royal Hotel, November 19. Two of the papers given at the recent Fall Clinic were reviewed. Dr. J. W. Morton reviewed Dr. Miller's clinic on "Amalgam". Dr. Roger McMahon reviewed Dr. Posner's clinic on "Local Anaesthesia".

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Mount Royal Dental Society

At a meeting of this Society held on October 2, Dr. L. J. Rosen presented the latest

technique for root canal operations.

At the October 30 meeting, a review of the clinics given at the Fall Dental Clinic was very ably presented by Drs. B. Bernfeld, N. P. Solomon, M. Toker, and E. A. Kutzman.

On Nov. 20, Surgeon Lieutenant Commander Digby Leigh was the guest speaker. He was introduced by Dr. B. Bernfeld and gave a very interesting and instructive talk on General Anaesthesia. Following a discussion and motion pictures, Dr. A. Scherzer moved a vote of thanks and made a presentation to Dr. Leigh. Dr. J. Fineberg was in the chair.

Montreal Dental Nurses' and Assistants' Association

The annual meeting of this Association was held November 25 following a luncheon in the Mount Royal Hotel at which Dr. R. E. McMahon was the guest.

Annual reports were read by the retiring officers; followed by the election of the Executive and Committee Chairmen for 1945-46. The new slate is as follows:-

<i>President</i>	Mildred Fincher
<i>Vice-President</i>	Joan Green
<i>Rec. Secretary</i>	Mel Rundle
<i>Corres. Sec.</i>	Norah Johnson
<i>Treasurer</i>	Marie Keenan
<i>Program</i>	Gene Newell
<i>Publicity</i>	Olive Goodenough
<i>Social & Reptn.</i>	Velma Wilband & Evangeline Larue
<i>Membership</i>	Florence Limoges & Audrey Drury
<i>Convention</i>	Margaret Good & Joan Green
<i>Editor</i>	Margaret Good & Gene Newell

Congratulations to all who contributed to the success of our Poster Display.

Especially we want to congratulate our three winners:- *1st Prize*: Florence Limoges. *2nd Prize*: Audrey Drury. *3rd Prize*: Mel Rundle.

Thank you, too, Velma, for all your efforts in bringing the posters to everyone's attention.

(My, haven't we got a lot of hidden artists in our midst!!)

Montreal Dental Nurses

The Montreal Dental Nurses held their annual Christmas party on Monday, December 17 at the 400 Club. There were about thirty nurses present. A very enjoyable evening was spent with games and a program. Everyone had a grand time.

The girls have taken a keen interest in their work for the Montreal Military Hospital for which the proceeds of the party were used.

I would like to take this opportunity to wish a very happy and successful year to all our Dental Nurses and their families and extend a cordial invitation to get in touch with us through me when you come to Montreal, so that we may get to know each other better.

Olive Goodenough

NOVA SCOTIA

Halifax Dental Society

The regular monthly dinner meeting of this Society was held at the Nova Scotian Hotel on Nov. 22. The meeting was observed as "C.D.C. Night", with special speakers outlining the activities of the Corps in its various phases.

Major H. S. Crosby gave an interesting synopsis of his service in various cities of Canada being attached to the Royal Canadian Air Force, the treatment given and methods being very similar to usual civilian practice. Each air force command had a Canadian Dental Corps Coy., which took care of all treatment for that particular command with exception of the North West Air Command. Treatment was supplied to NWAC by the company attached to the air force command situated adjacent to this area. The speaker considered that the Dental Clinic officers did and are doing an excellent job, supplying a high quality of treatment in such a manner as to stimulate the desire among all ranks for dental service, which it is hoped will be reflected in ex-service personnel seeking this service throughout the remainder of their lives.

Major Murray Logan who went overseas in 1939 told, in an amusing and at times a

dramatic way, of his experiences. His services began during his trip over. He served in England, France and Belgium and was attached to various units as well as putting in considerable time with the mobile clinic. Of particular interest was a description of the attack on Caen where the clinic was practically in the front line and came under fire, a hot spot indeed. Major Logan is now attached to The Department of Veterans' Affairs, while Major Crosby has resumed private practice. Major George McIntosh also has returned to practice and was given a cordial welcome.

A resolution of approval and appreciation was adopted on behalf of the Kinsmen's club which through the efforts of Dr. J. P. McGuigan has decided to sponsor and finance a dental clinic for deserving school children of Halifax. There will be four dentists who will each operate one morning a week. The clinic will act as an auxiliary to the regular school clinic which is unable to cope with demands made upon it.

Victorian Order Dental Clinics

Dartmouth dentists have agreed to give their services free at the V.O.D. dental clinic for another season, as there are so many children dependent upon this clinic for dental service.

BRITISH COLUMBIA

Visit of C.D.A. Officers

The President and Secretary of the Canadian Dental Association, Dr. Harvey W. Reid and Dr. Don. W. Gullett addressed members of the College of Dental Surgeons of B.C. during their trip to the West. In Vancouver the meeting was held at the Hotel Vancouver on November 7 and was held in conjunction with the regular monthly meeting of the Vancouver Dental Society. In Victoria the meeting was held on November 8 in the Empress Hotel and sponsored by the Victoria Dental Society. At both meetings a record attendance greeted the C.D.A. officials who gave fine talks on the activities of the national association and the problems facing the dental profession.

To the many questions that were asked excellent replies were received and no doubt a better understanding of the affairs of the

C.D.A. was left with the members who were fortunate enough to attend these meetings.

Vancouver Dental Society

At the meeting of this Society held on November 7 the following were elected to membership:

- (1) Dr. O. W. Mickelson—Graduate of the Univ. of Alberta.
- (2) Dr. K. Tawse—Graduate of the Univ. of Oregon.
- (3) Dr. W. S. Porteous—Graduate of the Univ. of Toronto.
- (4) Dr. A. F. C. Bruchet—Graduate of the Univ. of Oregon.
- (5) Dr. R. L. Scharff—Graduate of the Univ. of Toronto.
- (6) Dr. H. MacCrostie—Graduate of the Univ. of Toronto.
- (7) Dr. W. Julien—Graduate of the Univ. of Oregon.
- (8) Dr. S. B. Gelfand—Graduate of the Univ. of Alberta.
- (9) Dr. A. Olfman—Graduate of the Univ. of Alberta.

SASKATCHEWAN

Saskatchewan Dental Society

This Society at its December meeting had as its guest speaker, Professor J. W. G. MacEwan, head of the Department of Animal Husbandry, University of Saskatchewan. Professor MacEwan gave a most interesting address on the subject, "The Romance in Agriculture," dealing particularly with that of live stock and grains.

Dr. Newman, our President, outlined in brief the program of the winter activities of our Society.

Regina Dental Society

At the December meeting of this Society, Dr. L. J. D. Fasken gave a detailed report on the work of the Council during the past year.

Dr. J. M. Reffel presented a paper on "Denture Stability as Secured with the Fournet-Tuller Technique."

Dr. R. N. Reid discussed the use of Amalgam.

President Dr. H. M. Schweitzer welcomed back from army service Majors Robb and Reid, Cpts. Campbell, Dixon and Garth Johnson.

GENERAL NEWS

Department of National Health and Welfare

At a dinner for the members of the Dominion Council of Health, which met in Ottawa in November, the Hon. Brooke Claxton stated that to increase the effectiveness of the Department of National Health and Welfare, new divisions or positions have been authorized to deal with health insurance, tuberculosis control, mental health, blindness control, *dental health*, food and drugs advertising control, as well as with the health of government employees.

Western Trip of the President and Secretary of the C.D.A.

These officers visited the following cities in October and November; Regina, Lethbridge, Calgary, Vancouver, Victoria, Edmonton, Saskatoon and Winnipeg. The meetings were well attended and much enthusiasm for the work of the C. D. A. was apparent. The total attendance at the meetings was well over fifty per cent of the dentists practising in the four western provinces which is a most creditable attendance.

All meetings were addressed by both President and Secretary and a great deal of credit is due to those in each centre who made the arrangements for the visit. It was manifest that excellent preparations were made for every meeting.

Percy R. Howe Receives Honorary Award of A.D.A. Patent Committee

Percy R. Howe, director of the Forsyth Dental Infirmary, has been awarded the honorary plaque which is presented annually by the American Dental Association through the Process Patent Committee. The award is given each year to an individual, living or dead, whose contributions to the advancement of dentistry are considered to deserve special recognition.

Experimental Prepayment Plans

The Council on Dental Health of the American Dental Association recommends that experimental dental service prepayment plans

be inaugurated under the direction or supervision of component dental societies, under the following conditions: (1) The city or political subdivision selected should be of not less than 100,000 population. (2) The trial period should be twelve months. (3) The enrolment should not exceed 5,000 persons during this trial period. (4) The enrolled persons should represent a cross-section of employed groups within certain income limitations. (5) The plan should be offered only to groups of ten or more employed persons and through their place of employment on a payroll deduction basis. (6) A minimum of 60 per cent of the persons in an employed group should be enrolled. (7) Sound enrolment procedures as followed by existing voluntary nonprofit hospital and medical service plans should be adopted.

It is proposed that the experimental program be financed by an underwriting fund, in order that the participating dentists may receive the prevailing fee for service rendered, in case the amount collected from the subscriber does not meet the actual costs during the experimental period. When actuarial data have been obtained, the monthly payment by the subscriber can be adjusted to make the prepayment plan self-sustaining. In addition, if surplus monies accrue, additional dental service benefits may be offered to the subscriber.

Dental services to which subscriber and dependents would be entitled during the experimental period include: (1) dental examinations, limited to two per calendar year per person, (2) prophylaxis, limited to two per calendar year per person, (3) extractions, including the extraction of impacted teeth, (4) filling, when amalgam, silicate and other cements are used, (5) treatment of diseases of the mouth limited to patients under 19 years of age, (6) emergency treatment for the relief of pain, (7) treatment of jaw fractures and (8) x-ray service.

The following services are not included: (1) denture, bridge, inlay, crown, orthodontic and general anaesthetic, and house calls; (2) any service covered by workmen's compensation or employer's liability laws; (3) service

rendered by or through any federal, state, or charitable agency; (4) service covered by reason of recipient's qualifying for veterans' benefits or benefits for dependents of veterans, and (5) dental service for a disease or injury to a subscriber or dependent for which he is under treatment or anticipates the need for treatment at the time that application is made for this certificate.

—N.Y. Jour. of D.

Dental Patients Walk

A sidelight of the recent elevator strike in New York City brought additional evidence on the lack of understanding of the importance of dental care on the part of the

public. Striking elevator operators, attached to large medical buildings, drew a line of distinction between those who required dental treatment from those receiving medical and surgical care. Only the medical and surgical patients were taken up and down the elevators.

This incident bespeaks the lack of awareness of the relationship of dental infection to general bodily health. As far as the strikers and building superintendents were concerned, their attitude was summed up by one building superintendent when he said, in reply to the query why dental patients had to walk, "They (the dental patient) walk on their feet not their teeth."

—N.Y. Jour. of D.—

The atomic bomb has demonstrated, perhaps more vividly than any other single happening in history, the overwhelming importance of science in our national life. The same skill and scientific know-how which helped to bring rapid and decisive victory on the war fronts must now be used for the purpose of peace and national security. By continuing to promote the progress of science and the useful arts, as the Founding Fathers so wisely ordered, we shall be able to make large strides in improving our national health, in making secure our national defense, and in promoting prosperity and full employment.—Senators Kilgore and Magnuson of U.S.A.

A distinction must be drawn between an inferiority complex and inferiority feelings. They are not the same. The latter are a stimulus to all upward striving. An inferiority complex Adler defined as the "inability to solve life's problems."—J. M. G. in the "Psychologist."

Adler (the great psychologist) once ended a lecture: "I wish you all a creative inferiority feeling." . . .

IN MEMORIAM

Harry M. Cooke, of the Canadian Dental Corps, died from a heart seizure at the Kingston Military Hospital on November 23.

Captain Cooke was graduated from the Royal College of Dental Surgeons of Ontario in 1923. He served overseas in the First Great War, and again responded to the call of patriotism in the Great War just ended. He was a Captain in the

Canadian Dental Corps and had been stationed in Kingston.

After graduation he practised in Oshawa until 1940 when he moved to Kingston, where he practised until the time of his enlistment.

Dr. Cooke is survived by his widow, two daughters and two sons. Dr. Allan Cooke of Kingston is one of five brothers.

IN MEMORIAM

Ross V. McLaughlin, of Napanee, Ontario, aged 52 died on December 4 after a brief illness.

He was graduated from the Royal College of Dental Surgeons of Ontario in 1917, and immediately set up practice in Napanee where he has continued until his death.

Dr. McLaughlin served in the First World War as a sergeant in the Canadian Army Dental Corps. He was a member of the local branch of the Canadian Legion and a member of Union Lodge No. 9 A.F. & A.M.

He is survived by a son, a daughter, and a brother.

James McAdam McIntyre, of Ottawa, Ontario, aged 72, died December 15. He was graduated from Northwestern University and saw service with the Dental Corps in the First World War. He practised in Toronto before moving to Ottawa eighteen years ago.

Dr. McIntyre is survived by his widow and one daughter.

Austin C. Blackwell, of Toronto, Ontario, aged 49, died December 1 after a few days' illness. He was graduated from the Royal College of Dental Surgeons of Ontario in 1922. He was a member of Alpha Lodge, A.F. & A.M., the West Toronto Dentists' Association and North Parkdale United Church and a former member of the Argonaut Rowing Club.

Dr. Blackwell is survived by his widow, his mother and one sister.

Albert V. Summers, of Ottawa, Ontario, aged 66, died in hospital in December following a lengthy illness. He was well known in sport circles and took an active part in curling, golf and tennis prior to his retirement several months ago due to ill health.

William H. Liddle, of Ottawa, Ontario, aged 86, died December 3. He taught school for a number of years before entering the Royal College of Dental Surgeons of Ontario, from where he was graduated in 1898. He began to practise in Ottawa, where he remained until his retirement in 1935.

He took an active part in church work and was a member of St. James United Church.

Dr. Liddle's wife predeceased him 18 years ago. Surviving are two daughters.

Emery J. Adams, of Magog, Quebec, aged 72, died November 25, following a prolonged illness. He was graduated from McGill University in 1896 and began practising in Magog two years later.

He was an active member of St. Paul's United Church where he led the choir and was superintendent of the Sunday School for a number of years. His favourite pastime for the last ten years was wood-working.

Dr. Adams is survived by his widow and six children.

Frederick A. Denne of Stayner, Ontario, died at the Collingwood General and Memorial Hospital on December 25, in his eighty-second year.

Dr. Denne graduated from the School of Dentistry of the Royal College of Dental Surgeons of Ontario in 1884. He has practised in Stayner since 1891 and if he had lived until March 1946 he would have completed 62 years in dental practice.

Dr. Denne was an honorary member of the Royal College of Dental Surgeons of Ontario and had practised longer than any other dentist on the Ontario register. He was a member of the Anglican Church.

He is survived by his daughter at home.

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Considerations Sur Les Traitements De Canaux

par MARCEL ARCHAMBAULT, B.A., D.D.S., L.D.S.

Messieurs, nous sommes réunis, ce soir, en vue d'étudier un aspect tout à fait nouveau sur les traitements de canaux. J'aimerais vous voir sortir d'ici avec un enthousiasme débordant et un désir ardent d'en connaître davantage. Avant d'aborder le sujet, permettez-moi de vous dire en toute sincérité que ce n'est pas mon intention de poser devant vous en maître infailible. Si j'ai acquis des connaissances dans ce domaine il me manque encore l'expérience. J'avoue que dans de telles dispositions et à cause des divergences d'opinion qui peuvent exister parmi nous en cette matière, c'est peut-être un des sujets les plus difficiles à traiter devant un auditoire déjà renseigné. Faute de temps, je me limiterai aux grandes lignes sans pénétrer dans les détails de la technique proprement dite.

Aux Etats-Unis, dès le début de cette guerre, la divergence d'enseignement a amené un petit groupe d'hommes, parmi les plus compétents dans cette matière à se réunir et à fonder l'American Association of Endodontia. Parmi les fondateurs de cette société, pour n'en citer que quelques-uns, mentionnons les Docteurs Clyde Davis, Ballint Orban, Coolidge, Grossman, Sommer, Hosper, et Van Valley, le future président de l'année 1946 etc. Les buts de cette société sont d'accumuler tous les documents et toutes les méthodes nouvelles, de les classer à leur juste valeur scientifique et de faire part à la profession de tout ce qui a trait aux traitements de canaux. C'est à la fois une société d'études et une société arbitraire. Ceci a eu pour effet de stimuler l'intérêt des nôtres, de rehausser notre mérite aux yeux de la profession médicale par

*Causerie donnée à la Société Dentaire de Montréal le 18 septembre.

le sens vraiment scientifique de la société et de rassurer le simple praticien sur les méthodes à suivre.

De toutes les méthodes préconisées, celle du docteur Ralph Sommer est considérée comme étant l'une des plus pratiques et des plus scientifiques de notre époque. Elle est pratique parce que le traitement est court et efficace. Elle est scientifique parce que l'auteur a consacré tous ses efforts depuis 19 ans à prouver le pourquoi de toutes ses actions et pour employer sa propre expression: "beyond the shadow of a doubt!" Aussi, cette méthode prend-elle de plus en plus de vogue d'un travers à l'autre du pays.

Messieurs, je crois qu'il est inutile pour moi de souligner l'importance des traitements de canaux dans la pratique courante. Tous les jours, il se présente chez nous des cas de dents dont la pulpe est atteinte. Tous les jours, vous avez à décider si telle ou telle dent devrait être conservée ou extraite.

Il ne faut pas oublier qu'en toute justice le patient a le droit d'exiger de vous un diagnostic consciencieux. A lui par la suite de décider. Le patient qui se présente à notre bureau, le fait de bonne foi et le plus souvent sur la plus haute recommandation. Lui ne connaît rien des dents. Il se fie à votre bon jugement et à votre honnêteté. Il est donc de votre devoir de le renseigner et de faire pour lui ce que vous voudriez qu'on fît pour vous-même si vous étiez le patient. Un jour, le docteur Johnston d'Atlanta, Georgie, fut publiquement critiqué par un confrère sur sa méthode de traitements de canaux. Ce dernier alla jusqu'à dire que quelque fût la méthode: "Root canal therapy was a waste of time and money!" Mais quelle ne fût pas la surprise du Dr. Johnston quelques années plus tard de recevoir comme patient ce même dentiste.

Dans la Province de Québec, la profession est critiquée à cause de son manque de sens médical et de sens scientifique. C'est l'extraction qui prime. La faute n'en peut être jetée entièrement sur nous si nous considérons le niveau d'éducation chez le peuple et son état financier. Mais, par contre, nous pouvons certainement assumer notre part de responsabilité. Il est temps et même plus que temps pour nous de nous ressaisir. Nous nous acheminons lentement vers l'étatisation de la profession. Comment aimeriez-vous, messieurs, voir le jour où vous écrirez une prescription pour un haut et bas?

Ne dites pas comme certains: "Ah! les traitements de canaux, c'est bien trop d'ouvrage! Vous n'y pensez pas, se laver les mains, poser la digue! Ça ne paie pas!" Non, messieurs. Pour celui qui n'a jamais fait une incrustation, naturellement, c'est difficile. Pour celui qui n'a jamais préparé une pile pour jacket crown, c'est compliqué. Mais une fois qu'il a maîtrisé les détails, tout s'aplanit et ça devient pour lui une affaire de routine dans la pratique courante. C'est la même chose pour les traitements de canaux. Vous pouvez vous y intéresser au point d'y trouver un plaisir réel et une satisfaction personnelle à faire ce genre de travail mais encore faut-il vous y intéresser. Même ceux qui se piquent de pratiquer la meilleure dentisterie au monde.

Les traitements de canaux sont rémunérateurs si on considère les dépenses encourues. Nommez-moi un genre de travail en dentisterie, sauf la chirurgie bien entendu, qui ne vous occasionne pas des frais de laboratoire assez considérables. Ou encore, nommez-moi un genre de travail qui, fait convenablement, n'exige pas tout autant votre attention que les traitements de canaux. J'irai plus loin. Si vous sauvez une dent à votre patient, ça vaut autant en signe de piastre sinon plus que le pont le mieux façonné au monde. Donc, qu'est-ce qui vous empêche d'exiger le même tarif. Comme résultat, ça devient payant et intéressant. Non seulement vous avez contribué à rendre votre pratique plus scientifique, mais votre compte de laboratoire a diminué d'autant. Et à la fin du mois, vous pouvez faire un bon pied de nez à votre mécanicien.

Cependant, messieurs, il n'existe aucune méthode au monde qui puisse nous

permettre de sauver tous les cas qui se présentent. C'est pourquoi un diagnostic sérieux s'impose chaque fois que vous avez une pulpe infectée ou dévitalisée. L'examen général du patient devient de rigueur sous forme de questionnaire. Parce que l'état du patient peut influencer sur le traitement ou sur la guérison par suite d'intervention chirurgicale. L'examen des tissus environnants de la dent et de la membrane péri-dentaire au moyen de la radiographie est encore plus important. L'anatomie des racines ne doit pas être négligée. La couronne reste votre dernière considération. Cependant, il faut pouvoir être capable de restaurer celle-ci une fois le traitement terminé.

Ne promettez rien au patient sur les résultats du traitement. C'est notre habitude à nous les dentistes, contrairement aux chirurgiens ou aux médecins, de promettre la lune avant même de savoir si on peut la décrocher. Pour ceux qui débudent dans ce domaine, il n'est pas à conseiller d'entreprendre les cas difficiles que même le spécialiste le plus expérimenté n'oserait entreprendre. C'est pourquoi le diagnostic et l'interprétation radiographique sont si importants.

Toutes les méthodes de traitement sont bonnes puisque ce sont les résultats qui justifient vraiment les moyens. Comme toutes, elles sont toutes basées sur l'aseptie. Or, pour obtenir cette aseptie, on ne peut le faire d'une façon définitive sans avoir au préalable isolé la dent, stérilisé convenablement le champ opératoire, les instruments, etc. En plus, il nous faut recourir à des antiseptiques assez puissants pour détruire les micro-organismes qui se multiplient jusque dans les canalicules dentinaires et même au delà de l'apex.

Pour un temps, on a cru avoir résolu tous les problèmes avec l'ionisation à cause de ses qualités d'aseptie et de pénétration. Cependant, aujourd'hui on a délaissé l'ionisation pour ne la réserver que pour les cas plus rebelles. La raison, c'est que l'ionisation est lente et cause souvent la décoloration de la couronne. On a donc substitué à celle-ci le Paramonochlorophenol dans le camphre qui lui est aussi efficace tout en ne décolorant pas la dent. En plus, il est facile de l'appliquer comme pansement dans le canal en quelques secondes, alors que l'ionisation prend de 20 à 30 minutes. Le résultat est tel que nous donnons comme moyenne 3.75 le nombre de séances pour un traitement complet.

A mon retour d'Ann Harbor, quelques-uns m'ont demandé s'il y avait du nouveau sur la pénicilline. Je réponds maintenant à ceux-ci qu'il y a beaucoup de nouveau. Mais le temps n'est pas encore venu de divulguer ces renseignements comme certaines revues dentaires ou grands quotidiens l'ont fait à tort et à travers. Pour la bonne raison que scientifiquement parlant, on ne peut pas avancer une théorie avant de l'avoir soumise à toutes les épreuves nécessaires. Disons que pour le moment, la pénicilline est encore à l'état d'essai et d'expérimentation. On a exigé au delà de 10,000 traitements avant d'accepter le paramonochlorophenol comme antiseptique de base. Quoi qu'il en soit, n'escomptez pas au moyen de ce produit biologique échapper aux manipulations ordinaires de l'aseptie et de l'obturation parfaite du canal. Le plus qu'on puisse espérer c'est de raccourcir la durée du traitement.

Pour vous permettre une meilleure vue d'ensemble de tout ce que comprennent les traitements de canaux, j'aimerais vous donner un tableau synoptique de la matière. Vous avez:

- 1° L'interprétation radiographique et le diagnostic.
- 2° La stérilisation des instruments, des fraises, des serviettes, de la gaze etc., de tout ce qui touche au canal. Ceci est important si on veut obtenir des cultures négatives. Etude microscopique des micro-organismes.
- 3° La disposition des instruments et des médicaments par ordre d'utilité.
- 4° L'isolement de la dent et l'ouverture de la couronne et de la chambre pulpaire
- 5° L'aseptie des canaux: a) au moyen d'antiseptique;
b) au moyen de l'ionisation.

- 6° La façon de procéder dans la prise de cultures: pour confirmer l'aseptie. Il faut deux cultures négatives subséquentes avant de pouvoir obturer définitivement un canal.
- 7° L'obturation des canaux des dents adultes:
on se sert du gutta percha pour les 6 dents antérieures et supérieures seulement—des pointes d'argent pour toutes les autres dents.
- 8° L'obturation des dents permanentes jeunes alors que l'apex est encore largement ouvert.
- 9° L'enlèvement des anciennes obturations de gutta percha.
- 10° La stérilisation immédiate des canaux au moyen du Sulfonic acid neutralisé par le bicarbonate de soude.
- 11° La résection de l'apex et l'apectomie sur les dent antérieures.
La résection consiste dans le brunissage de l'apex même, l'apectomie dans l'amputation du 1/3 apical de la racine afin de cureter derrière la racine.
Toute intervention chirurgicale exige une prémédication. A cette fin, vous avez le nembutale sous deux formes:
en capsules pour les adultes avec une dose de trois-quarts de grain ou un grain et demi;
sous forme de sirop pour les enfants avec une dose d'une cuillerée à dessert.
La postmédication est aussi importante:
La lumière infra rouge thérapeutique durant
20 minutes à dix-huit pouces de distance.
La cibalgine commè sédatif.
Les pansements humides: froids et chauds alternés de demi-heure en demi-heure.
- 12° La résection indirecte de l'apex ou Corrigan's foot résection ainsi appelée en mémoire de l'aviateur américain d'origine irlandaise qui alla s'échouer en Irlande prétendant s'être perdu.
Cette méthode consiste dans la stérilisation du canal et l'obturation du canal par l'apex alors qu'il y a une Davis crown ou un pivot dans le canal.
- 13° La technique du blanchissage des dents.
- 14° La pulpotomie des dents de 6 ans chez les enfants.
- 15° *Considérations générales:*
 - a) Sur les précautions à prendre dans la préparation des cavités pour éviter l'hyperémie de la pulpe.
 - b) La thérapeutique propre aux traitements de canaux, à la pulpite aiguë, à la périostite, etc.
 - c) Méthodes d'anesthésie locale en rapport avec les traitements de canaux, car il ne faut pas oublier que l'anesthésie doit être plus profonde que pour une simple extraction.
 - d) Le focal infection en dentisterie en rapport avec les dents dévitalisées ou abcédées.
 - e) L'arthrite sous toutes ses formes et les maladies endocriniennes et leurs effets sur les tissus buccaux et vice-versa.
 - f) L'étude neuro-psychologique en dentisterie.

Le Traitement De La Paradentose Et Ses Diverses Tendances.

Par: J. THEBAUD.—D.D.S., M.Sc.D., L.L.L., F.I.C.D.,
A.I.D.O., F.A.P.H.A., L.L.D., (h.c.)

Depuis plus d'un demi siècle, on s'est lancé résolument à l'assaut de la paradentose en employant des méthodes extrêmement variées; il est entendu qu'en pratiquant ces divers traitements, le mot GUERISON COMPLETE ne saurait être revêtu de sa pleine valeur. D'une façon relative, elle se rapporte à l'idée d'une amélioration physiologique sensible et à celle d'une CURE à LONGUE ECHEANCE; car, même de nos jours, nul ne saurait prétendre traiter la paradentose d'une façon radicale, quelqu'en soit le stade pathologique: Quand le pronostic est bon, parceque le terrain est favorable, et que les lésions constatées ne sont pas susceptibles de compromettre le succès d'une intervention, les résultats peuvent être très satisfaisants au point d'assurer les fonctions physiologiques des dents pendant un certain nombre d'années, avant toute possibilité de récidive.

Les clapiers pyorrhéiques peuvent être curettés au point d'être totalement débarrassés des masses granuleuses pathologiques et la réadaptation des fibres de la membrane périodontaire au néo-cément n'est plus considérée comme un phénomène biologique rare; ce processus est même assez courant quand les interventions sont pratiquées par des mains expertes — Mais, il n'a pas été encore prouvé que la réadaptation se produit d'une façon sûre, après chaque intervention.

Il reste donc à établir un ensemble d'évidences scientifiques; ce qui fait présumer qu'on n'a jusqu'ici qu'une vision incomplète de la solution définitive que mérite cette question.

Un simple regard rétrospectif sur la thérapeutique mise en valeur jusqu'ici, nous permet de considérer un nombre assez important de méthodes employées avec la tendance marquée et très sincère d'éliminer radicalement la pyorrhée; et cette thérapeutique est d'une diversité telle qu'il n'est pas facile de trouver dans la médecine générale autant de méthodes en regard d'une seule affection!

Ceci démontre la sincérité de l'effort déployé tant par les dentistes que par les stomatologistes qui ont si souvent tenté d'adjoindre au traitement local l'élimination des causes systémiques incriminées.

Signalons en passant les méthodes suivantes:

- 1° Détartrage subgingival suivi de polissage méticuleux.
- 2° Emploi d'antiseptiques moyens et même escharotiques.
- 3° Application de "Pointes de feu" ou du cautère simple.
- 4° Ligature des dents branlantes au moyen d'attelles métalliques.
- 5° Emploi de l'Electro-cautère.
- 6° Injections sous muqueuses d'émétine ou de drogues spirocides.
- 7° Application de la cataphorèse.
- 8° Emploi des rayons ultra-violets.
- 9° Séances de radio-thérapie.
- 10° Insufflations d'oxygène.
- 11° Curettage chirurgical des culs-de-sac pyorrhéiques.
- 12° Ablation des tissus pathologiques hypertrophiés.
- 13° Electro-coagulation.
- 14° Emploi de substances chimico-coagulantes.

A l'appui de ces techniques, il existe une mosaïque de théories et une littérature très étendue. Cette abondante littérature qui symbolise l'inquiétude des membres

de toute une profession fournit la preuve évidente, qu'en pathologie, les méthodes ne sont pas les mêmes que celles employées dans les sciences pures, comme dans la Physique où les expériences peuvent être sectionnées et répétées à volonté, où la voie est ouverte à l'observation inductive.

Au sujet du traitement de la parodontose, il ne doit échapper à personne, qu'une plus large part doit être faite aux considérations d'ordre biologique desquelles découlent les notions histopathologiques émises jusqu'à ce jour. Aussi, le praticien qui n'a pas la connaissance parfaite des changements pathologiques qui s'opèrent d'une façon si variable dans le parodontium, risque d'accomplir un acte mécanique dont le résultat n'atteint aucun but scientifique.

Il est facile de noter que les modes de traitement adoptés jusqu'aux environs de la première guerre mondiale étaient surtout en rapport avec les diverses notions étiologiques de la pyorrhée et non avec les recherches faites dans le domaine pathologique à cette époque. C'est là une tendance nettement marquée; car on peut noter une fluctuation assez sensible dans le choix des traitements, et cette instabilité correspond exactement à la nosologie invoquée à certaines périodes par diverses écoles. Le fait est que l'on s'est contenté de suivre uniquement le principe de s'ATTAQUER à la CAUSE DU MAL sans trop se soucier du problème histopathologique. Par exemple, on peut constater qu'à l'époque où le tartre "sérique" était incriminé comme étant la cause principale de la parodontose, le traitement se limitait presque uniquement au détartrage; quand on a cru que l'Endaméba buccalis était l'agent principal de la parodontose, on a recouru sans restriction à l'emploi de l'émétine; quand l'hypothèse du spirochète microdentium comme élément causal a prévalu, la thérapeutique spirocide a été à la mode; quand le polymicrobisme de l'affection a été démontré, la vaccinothérapie faillit supplanter toutes les thérapeutiques antérieures.

Black père, Zamnesky et Hopewell-Smith avaient entrepris d'heureux tâtonnements, et de patientes recherches qui avaient pour objectif d'analyser la dégénérescence du procès alvéolaire. La théorie de l'infection initiale dans les glandes périécementaires dites de Black, et celles de l'"halistérésis osseum" de H. Smith, bien qu'elles ouvraient la voie aux controverses, ne manquaient pas d'intérêt scientifique; elles méritaient d'être considérées et développées, parcequ'elles étaient susceptibles d'imprimer une savante orientation à la thérapeutique de la périécementoclasie. Mais vers 1915 et 1916, l'école "Bactériologiste" capta le suffrage de la profession, tant par ses hypothèses que par ses trouvailles sur la nature spécifique des microorganismes trouvés dans les sécrétions pyorrhéiques. C'est ainsi que Noguchi, Hartzel et Chivaro ont conduit à l'emploi local des arsenicaux, et à celui d'un alcaloïde de l'ipéca.

Peu de temps après, cette thérapeutique médicamenteuse a été vite dépréciée, car la spécificité de la pyorrhée ne pût être démontrée ni expérimentalement ni "in vivo". Le vent allait changer de direction! En effet, une nouvelle tendance fut alors créée par l'école "histologiste" qui n'avait pas négligé ses investigations sur le problème de la dégénérescence du parodontium considérée comme la phase initiale de la parodontose.

Nous sommes au lendemain de la première guerre mondiale, Maurice Roy de France, Talbot des Etats-Unis et Gottlieb d'Autriche et d'autres stomatologistes ne sont peut-être pas d'accord sur une question de terminologie, mais si la cause principale n'est pas trouvée à ce moment, les causes accessoires sont décrites et la LESION PRINCIPALE EST BIEN CELLE QUI DEBUTE DANS LE PARADONTIUM, entraînant dans la suite, la désorganisation des tissus gingivaux. C'est alors qu'il est question: de sénilité précoce des bords alvéolaires,—d'ostéolyse,—de périécementite raréfiante fibreuse,—de désintégration de l'espace gingival,—et de prolifération de masses granuleuses dans la membrane périécementaire. La microphotographie vient donner à l'appui de ces recherches, des preuves évidentes de ce processus dégénératif, dans toutes ses phases. La thérapeutique subit donc de nouveau des

modifications complètes, elle change de direction et adopte une nouvelle orientation, celle qui est gardée jusqu'ici.

(A SUIVRE)

270 Avenue Outremont

Note Préliminaire Sur Une Nouvelle Technique D'analgésie Et D'anesthésie En Obstétrique

Par

MOISE CLERMONT, F.I.C.A., R.C.P. (crt), Chef du service d'Anesthésie à l'hôpital de la Miséricorde, Anesthésiste en chef de la Faculté de Chirurgie dentaire de l'Université de Montréal.

JACQUES GAGNON, Du service d'Obstétrique de l'hôpital de la Miséricorde.
Gagnants du Prix Casgrain et Charbonneau, 1945.

Les médicaments pour soulager la femme en couches sont employés depuis que Simpson le premier éthérisait sa patiente en 1847. Depuis, l'anesthésie dans les accouchements a gagné graduellement le faveur des accoucheurs, puisque nous constatons qu'en 1902, Koen et Gauss décrivaient le "twilight sleep" dans la première période du travail.

Dans ces derniers quinze ans, cependant, plusieurs méthodes d'analgésie et d'anesthésie ont été tentées, et on a publié des quantités énormes de statistiques.

Il y a beaucoup de choses en commun entre l'anesthésiste et l'accoucheur pour la conduite de l'anesthésie obstétricale.

L'administration d'un anesthésique au moment de la délivrance, qui était il n'y a pas si longtemps, une chose très simple, est devenue maintenant une méthode très complexe depuis l'introduction de nouvelles méthodes d'amnésie et d'analgésie profonde. Avec cette dernière, cependant, l'accoucheur a procédé sans apprécier suffisamment l'effet que les méthodes amnésiques auront sur l'administration de l'anesthésie par inhalation, au temps ultime de la délivrance.

Nous croyons que les services d'anesthésie et d'obstétrique doivent coopérer dans ce champ d'action pour avoir les meilleurs résultats.

L'accoucheur moderne considère que l'analgésie est complète quand sa patiente n'a pas de douleur ou ne se souvient pas de ses douleurs, après que le travail est commencé et il considère le travail commencé quand les douleurs sont régulières, d'intensité modérée, à intervalle de toutes les cinq minutes, sans égard à la dilatation du col.

En plus du facteur sécurité pour la mère et l'enfant, plusieurs autres points ont aussi leur importance dans l'anesthésie obstétricale.

Le coût, non seulement des anesthésiques employés, mais aussi celui de la surveillance de la malade nécessitée par l'administration de ces anesthésiques, doivent être pris en considération. La facilité d'administration des anesthésiques, la rapidité de l'effet analgésique obtenu, et les suites post-anesthésiques plutôt plaisantes ont aussi leur importance.

Selon J. Kotz, professeur d'Obstétrique et de Gynécologie au "George Washington University", parlant du facteur sécurité, nous devons répondre à plusieurs questions.

1. Le médicament affecte-t-il l'organisme maternel?
2. Augmente-t-il la durée du travail?
3. Augmente-t-il l'hémorragie au temps de l'expulsion?
4. Augmente-t-il le nombre des interventions obstétricales?
5. Retarde-t-il la respiration chez l'enfant?
6. A-t-il quelque action sur le fœtus in utero?
7. A-t-il quelque action sur la physiologie normale du nouveau-né dans les premiers jours de sa vie?

Hingson, dans son récent volume "The Control of Pain in Childbirth" nous présente une brillante revue de tout ce qui s'est fait depuis les débuts de l'anesthésie obstétricale: chloroforme, éther, barbituriques, Démérol, méthode de Gwathmey, etc., enfin les anesthésiques locaux: procaine, métycaïne, etc., sus ou sous-arachnoïdiens.

Nous vous parlerons aujourd'hui d'une nouvelle technique d'analgésie et d'anesthésie obstétricale, qui essaie de répondre aux desiderata énoncés plus haut, d'une forme médicamenteuse connue depuis quelques années et utilisée ici de façon tout à fait inusitée, enfin de la synergie qui résulte de l'association pentothal et protoxyde d'azote-oxygène.

C'est en recherchant un procédé simple, commode pour le praticien, même à domicile, que nous avons fait les constatations cliniques dont nous devons vous entretenir. L'expérience clinique de plus de six mille cas d'anesthésie par association pentothal-protoxyde d'azote-oxygène, dans la petite et la grande chirurgie, donnant le pentothal rectal ou intraveineux comme anesthésique de base, suppléant par le protoxyde d'azote-oxygène, a conduit l'un de nous à employer la synergie qui existe entre ces deux anesthésiques à la pratique obstétrical. La première naissance sous cette nouvelle technique d'anesthésie survint à l'hôpital de la Miséricorde, en mai 1943, il y a deux ans exactement.

Le Médicament

C'est le pentothal sodium (Sodium, Ethyl I-Méthyl Butyl Thio-barbiturate) tel qu'utilisé pour anesthésie intraveineuse, employé ici au même titre qu'un anesthésique de base, en instillation rectale.

Propriétés

Amnésique, analgésique et anesthésique du système nerveux central. Absorption régulière, administration facile, élimination rapide, enfin, durant la période d'état, la parturiente perd en quelque sorte la notion du temps, demeure dans un état de quiétude bienfaisante et voit son anxiété grandement diminuée. Dix à quinze minutes après l'instillation rectale du pentothal sodium, la patiente se sent engourdie, somnolente: effet qui dure de deux à trois heures, parfois plus. Si les contractions sont très prononcées, elles peuvent éveiller la patiente quelque peu, mais sans qu'elle en ait souvenance. Elle retombe ensuite dans sa somnolence entre les douleurs. Pas d'excitation.

Agit sur le système nerveux central, produit une sensation de bien-être par engourdissement général, qui peut aller de l'euphorie jusqu'au sommeil profond, en passant par les différents degrés d'analgésie, d'amnésie et d'anesthésie suivant la dose utilisée, et même à dose égale, suivant les susceptibilités personnelles. Agit de façon élective sur les fibres musculaires du col de l'utérus et du périnée; accélérant de façon remarquable la dilatation et partant le travail.

Diminue notablement les interventions obstétricales, telles que les épisiotomies, les réparations de déchirures périnéales, par le relâchement musculaire qu'il donne; de même aussi les forceps de convenance, parce qu'il ne diminue en rien les contractions expulsives du corps utérin.

Résumé Pharmacologique

Nous souscrivons entièrement aux constatations pharmacologiques de Geo. J. Thomas, directeur du service d'anesthésie à l'Université de Pittsburg.

1. Le pentothal déprime considérablement le centre respiratoire. L'amplitude plutôt que le nombre des respirations est diminué. L'actuelle privation d'oxygène résultant d'apnée ou d'obstruction par laryngospasme produira invariablement des lésions cariaques, hépatiques ou cérébrales. Une dose trop considérable produira rapidement un arrêt de la respiration.

2. Le laryngospasme, l'éternuement, la toux, apparaissent soit spontanément ou sont le résultat d'un réflexe de stimulation quelconque. Le laryngospasme produira invariablement de la cyanose et peut embarrasser l'appareil circulatoire. On peut prévenir ces réactions par l'administration d'atropine 1/150 gr. 30 à 60 minutes avant l'anesthésie.

3. La glycémie s'élève quelque peu après l'administration du pentothal pour revenir à la normale dans les 4 heures.

4. Il n'y a aucune hémolyse ni aucun changement dans la coagulation du sang.

5. La numération globulaire et le taux de l'hémoglobine demeurent les mêmes.

6. Une légère diminution de la pression artérielle de 8 à 30 mm. de pression en rapport avec la quantité de pentothal absorbée. En d'autres mots, la baisse de pression est en rapport avec la profondeur de l'anesthésie et est probablement causée par réduction de l'activité sympathique et une privation d'oxygène.

7. Le pouls est habituellement accéléré de 8 à 15 pulsations par minute et de même cette accélération est en rapport avec la profondeur d'anesthésie et la privation d'oxygène.

8. L'électrocardiogramme ne démontre aucun effet sur le myocarde ni sur la conductibilité du système nerveux du cœur.

9. De récents travaux prouvent définitivement que le pentothal n'est pas décomposé dans le foie. En dépit du fait que certains auteurs aient décrit des dégénérescences du foie après l'administration de barbituriques chez les animaux l'observation clinique nous démontre que les thio-barbituriques ne doivent pas être considérés comme des toxiques spécifiques du foie, même après absorptions répétées. De même, le métabolisme du foie ne semble pas changé.

10. Le rein normal n'est pas affecté et une déficience fonctionnelle n'est pas aggravée par le pentothal. Et puisque l'élimination du pentothal n'est pas faite principalement par le rein, l'on doit en déduire qu'une insuffisance du rein même avancée n'est pas une contre-indication.

Anesthésique par Inhalation

Quoique nous ayons plusieurs agents anesthésiques employés en obstétrique, nous recherchons encore l'anesthésique idéal. Un tel anesthésique doit remplir les conditions suivantes: les périodes d'induction et d'élimination doivent être rapides et contrôlables en ce que l'anesthésique peut être cessé à volonté. Nous devrions obtenir à volonté et rapidement tous les degrés de l'anesthésie, passer d'une anesthésie légère à une anesthésie profonde avec la résolution musculaire nécessaire.

C'est un fait connu de tous que la femme en couches demande et tolère bien les différents anesthésiques par inhalation employés couramment dans la pratique obstétricale.

Le protoxyde d'azote a une valeur particulière dans ce champ d'action pour les raisons suivantes:

1. Il est d'une action rapide d'absorption et d'élimination.

2. Flexibilité d'action: le degré d'anesthésie peut être altéré à volonté.

3. Il ne retarde en rien les contractions utérines et même, si on s'en rapporte aux travaux de Samuel M. Dokek, il aurait plutôt tendance à les stimuler.

4. Réduction minimum de dépression post-anesthésique, due à ses propriétés non irritantes et à son élimination rapide.

5. Il possède les propriétés d'un anesthésique idéal, c'est-à-dire qu'il est soluble dans le sang et les tissus. Il est stable et passe dans l'organisme sans altération

chimique. Il est peu coûteux, non inflammable ni explosif. L'un de nous a fait fabriquer sur sa demande une très petite machine facile à transporter. Absence de réaction immédiate ou éloignée. Une grande marge de sécurité entre la paralysie respiratoire et le collapse circulatoire.

6. 100% d'oxygène prêt à être administré à la mère et au fœtus "in utero" ou à sa sortie.

Malheureusement, une erreur très répandue et sans fondement: la crainte de la cyanose dans l'anesthésie obstétricale au protoxyde d'azote, a contribué chez beaucoup de médecins à ne pas employer ce mode d'anesthésie à l'accouchement. Sans doute on doit toujours avoir présents à l'esprit les effets possibles de l'anoxémie sur le fœtus "in utero". Cette contre-indication, cependant, est plus fictive que réelle. S'il est proprement administré, nous n'aurons pas d'anoxémie puisque pour l'accouchement nous n'avons pas besoin d'une anesthésie profonde.

Ceci est dit pour l'anesthésie au protoxyde d'azote dans la pratique obstétricale sans pré-médication. Et dans notre technique nous employons des concentrations d'oxygène beaucoup plus généreuses, soit 20 à 50%.

Il est reconnu que l'inhalation d'un mélange de protoxyde d'azote-oxygène, dans la proportion de 20% d'oxygène, ne donne qu'une analgésie plutôt légère équivalente environ à l'injection sous-cutanée de 1/4 gr. de morphine.

Mais cette dose analgésique de protoxyde d'azote-oxygène venant se surajouter à la dose analgésique donnée de pentothal rectal, donnera comme résultante une anesthésie obstétricale idéale, et sans danger, avec toutes les caractéristiques que nous avons signalées plus haut: flexibilité d'action, résolution musculaire des muscles du périnée, etc.

Technique

Comme précautions préopératoires nous donnons:

1. Un lavement salé quelques heures avant l'instillation. Ce qui cependant n'est pas indispensable. Le lavement savonneux semble changer l'absorption et l'effet exposé aux excitations de la part de la mère durant son travail et une respiration analgésique du pentothal.

2. Aucune association avec d'autres barbituriques ou avec les opiacés, lesquels difficile chez l'enfant au moment de l'expulsion.

3. Rupture artificielle des membranes (pièce française).

4. Injection s.c. de 1/150 gr. d'atropine.

5. Surveillance du pouls, pression artérielle, état général.

6. Pentothal dissous dans de l'eau distillée ou non, en instillation rectale de préférence jusque dans le sigmoïde. Si l'instillation est faite lentement, la patiente n'est pas tentée de la remettre, une petite partie du sigmoïde est baignée, l'absorption est plus lente et les résultats plus prolongés.

7. Complément à la période d'expulsion ou avant si nécessaire avec le protoxyde d'azote-oxygène dans la proportion de 50 à 20% d'oxygène.

8. La dose de pentothal est de 0.01 grm. par livre de poids de la mère au moment de sa grossesse. Pour une patiente de 100 lbs, nous donnons 1 gm. de pentothal dissous dans 30 c.c. d'eau. Cette dose varie avec le poids actuel de la patiente, son état d'hypo ou d'hyperthyroïdie, sa conformation générale, ses habitudes de vie: alcool, tabac, etc., aussi ses susceptibilités personnelles: ceci pour atteindre la dose exacte. Cependant, comme cette variante n'est que de 10 à 20 ctgr. en plus ou moins, elle devient moins importante puisqu'il est possible d'accentuer le degré d'analgésie par l'adjonction de scopolamine à la dose de 1/150 gr. s.c. Ce médicament semble nous donner une association médicamenteuse très favorable.

9. Nous donnons le pentothal dès que les douleurs sont bien installées, le col effacé et que la patiente nécessite un calmant. Il est cependant à conseiller d'attendre que la dilatation soit d'un bon 50 sous, afin que le médicament conserve son effet

analgésique jusqu'à la période d'expulsion, où alors le protoxyde d'azote viendra compléter le tout. Le chloroforme, le chlorure d'éthyle et l'éther ne sont pas recommandés puisqu'ils diminuent les contractions expulsives de l'utérus et nous ont donné de la sub-involution utérine post-partum dans quelques cas où nous les avons employés. Pour la pratique courante et dans des mains non expérimentées, l'usage du cyclopropane est à déconseiller à cause de ses dangers d'explosion.

Constatations Cliniques

150 patientes furent soumises à notre technique, dont

- 130 primipares
- 18 secondipares
- 1 troisième bébé
- 1 sixième bébé

Chez ces 20 dernières, la méthode a été instituée parce que le travail ne procédait pas et se comportait de la même façon que chez les primipares.

Présentations et Positions

- 128 positions antérieures gauches ou droites
- 15 positions postérieures droites
- 1 position postérieure gauche
- 2 transverses
- 3 sièges

Chez ces patientes nous avons remarqué:

I. Un engourdissement, une sensation de bien-être 10 à 15 minutes après l'instillation rectale de pentothal sodium; chez quelques-unes, un état d'euphorie ou d'ébriété, chez d'autres, un sommeil bienfaisant sans cependant entraver le travail.

II. Dans 36% des cas, analgésie complète. 51% voient une diminution très remarquable de leurs douleurs à tel point que celles-ci furent comparées aux douleurs ressenties au tout début de leur travail.

Aucune douleur	54 cas	36%
Légères douleurs, patientes très bien calmées	76 cas	51%
Douleurs peu ou pas calmées	20 cas	13%

Ce qui nous donne une analgésie parfaite dans 87% des cas.

Chez ces 20 derniers cas, il y a eu, ou bien remise totale ou partielle du lavement, ou bien dose insuffisante par rapport au poids ou à l'intensité de la douleur.

La durée de l'analgésie se répartit comme suit:

De 1 à 2 hres	28 cas	19%
de 2 à 3 hres	111 cas	74%
de 3 hres et plus	11 cas	7%
Total	150 cas	100%

III. Le facteur amnésique a donné 90% de succès, dont voici la répartition:

Les patientes

a) ne se souviennent de rien	57 cas	38%
b) se souviennent à peine de quelques faits isolés ...	63 cas	42%
c) se souviennent de plusieurs faits	21 cas	14%
d) se souviennent de tout	9 cas	6%
Total	150 cas	100%

Fait remarquable, durant la période d'action du pentothal sodium, les patientes parlent, répondent aux questions de façon cohérente, obéissent aux ordres, recherchent les positions confortables et familières pour dormir, somnolent entre les contractions, lesquelles cependant les éveillent et les font se plaindre.

24 heures après l'accouchement à peine un souvenir vague, plus souvent nul de tout ce qui leur est arrivé.

D'excitation, très peu ou pas, à tel point que la surveillance ordinaire prêtée aux autres parturientes fut tout à fait suffisante.

IV. Une vitesse très remarquable de dilatation du col utérin. Nous vous ferons remarquer que, pour la bonne réussite du cas, la technique consiste à réunir trois facteurs principaux:

- a) que les douleurs soient bien installées et régulières;
- b) sans égard à la dilatation, que le col utérin soit au moins demi effacé, bien qu'il vaille mieux procéder lorsque la dilatation est d'une bonne pièce française;
- c) que la patiente nécessite un calmant.

En l'occurrence, l'instillation rectale a été instituée aux dilatations suivantes:

50 sous ou avant	20 cas	13%
Pièce française	69 cas	46%
Petite paume	61 cas	41%
Total	150 cas	100%

La vitesse de dilatation a été calculée à compter du moment de l'instillation rectale du pentothal sodium jusqu'à la dilatation complète, puis jusqu'à l'expulsion du fœtus, et enfin suivant la durée totale.

Dans le premier cas, nous avons obtenu les résultats suivants:

390 heures de travail réparties sur 150 cas. Ce qui nous donne une moyenne de 2 heures 36 minutes per cas.

Nous excluons 14 cas qui ont nécessité 5 heures et demie de travail et plus, où la technique n'avait pas été suivie. Ces 14 cas s'expliquent par le fait que l'instillation rectale fut donnée avant l'effacement du col. C'est ce qui survient en général dans les positions postérieures ou transverses, où la tête n'appuie pas parfaitement bien sur le col à cause d'un défaut d'engagement de la tête du fœtus. L'utérus entre alors en contractions douloureuses dès le début du travail. Il vaut mieux dans ces cas utiliser les calmants ordinaires et attendre un effacement plus prononcé et une dilatation plus grande du col utérin. Chez ces patientes, il y eut cependant soulagement temporaire et persistance de la facilité de dilatation du col et du relâchement du périnée, jusqu'à l'expulsion du fœtus. A cause de la souffrance du bébé, quelques cas ont nécessité la dilatation manuelle qui fut alors beaucoup plus facile qu'à l'ordinaire.

Si donc nous excluons ces 14 cas, dont la moyenne d'heures de dilatation à compter de l'instillation rectale à la dilatation complète fut de 9 heures, nous obtenons pour les positions antérieures et les sièges:

263 heures pour 137 cas, ou 1 heure 54 min.

Les obstétriciens savent bien que cette période de temps comporte habituellement 10 à 15 heures de travail et de douleurs difficilement supportables de la part de la mère.

Si maintenant nous considérons la période de temps écoulée entre l'instillation rectale du pentothal sodium et l'expulsion de l'enfant, nous obtenons les chiffres suivants:

509 heures pour 150: 3 heures 25 minutes.

Excluons les 14 cas plus haut mentionnés et nous avons:

360 heures pour 137 cas: 2 heures 36 min.

Plusieurs facteurs viennent en ligne de compte lorsqu'il s'agit de déterminer le début du travail. Toutes les patientes n'en ont pas la même notion, comme d'ailleurs toutes ne deviennent pas en travail de façon régulière et décisive de la même manière. Bien souvent les douleurs mouches sont ressenties durant 24 heures à 36 heures avant que le travail ne s'installe définitivement. Nous vous laissons donc le soin de faire les interprétations qui s'imposent. En l'occurrence, nous avons compilé les statistiques telles qu'elles se sont présentées.

(A SUIVRE)



NIAGARA FALLS IN THE GRIP OF WINTER

By courtesy of Evangelical Publishers



GEORGE C. DARTS, D.D.S.
Vancouver, British Columbia

President of the B. C. Dental Association
Past President Vancouver Dental Society and
Vancouver Ferrier Study Club
Graduate of the R.C.D.S., 1925.

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THE RELATION OF ASCORBIC ACID INTAKE TO GINGIVITIS*

by Major W. J. Linghorne, Major W. G. McIntosh, Canadian Dental Corps;
and Air-Commodore J. W. Tice, Group-Captain F. F. Tisdall,
Wing-Commander J. F. McCreary, Medical Branch R.C.A.F.;
and T. G. H. Drake, M.B., A. V. Greaves, M.B., W. M. Johnstone, R.T.,
Hospital for Sick Children, Toronto

INTRODUCTION

EXAMINATION of service personnel and apparently healthy young civilians in Canada has revealed that inflammatory changes in gingival tissue are of frequent occurrence. Surveys of 1448 apparently normal non-selected R.C.A.F. personnel under 30 years of age, including civilians on entry as well as individuals who had been in service for several months, showed that approximately 20 per cent had gingivitis usually asymptomatic of a degree which could be readily detected by superficial examination of the oral cavity.¹ In addition a study of the records of the Canadian Dental Corps in 1941 revealed that approximately 1800 R.C.A.F. personnel were reporting to dental officers each month with painful, swollen or bleeding gingival tissues. So common are these changes that they should be of concern to both the dental and medical professions.

Gingivitis has been extensively described in the literature but there are a number of opinions concerning its cause. Kruse, in a personal communication (subsequently published in July 1942²), expressed the belief that certain changes beginning with vascular engorgement of gingival tissue, followed by redness, swelling, sometimes accompanied by destruction of tissue, then thickening and later atrophy, are primary evidences of a lack of ascorbic acid, and that the process may be reversed by the administration of large amounts of ascorbic acid over a prolonged period. Studies³ previously conducted in the R.C.A.F. demonstrated that the intake of ascorbic acid from the ration available at that time was considerably below the 75 mgs. per day recommended⁴ for optimum nutrition. The ration contained approximately 140 mgs. of ascorbic acid in its raw state but destruction in food preparation was such that an average

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of only 23 mgs. of ascorbic acid was retained in the food served (Footnote 1). This low intake was reflected in a lower than desirable ascorbic acid plasma level. The average fasting plasma level of ascorbic acid among personnel in the R.C.A.F. was slightly below 0.2 mgs. per cent, contrasted to 0.7 to 1.0 mgs. prevailing when the intake was in the neighbourhood of 75 mgs. per day. It appeared that the same conditions of ascorbic acid intake applied to civilians as well as to service personnel, as the average ascorbic acid plasma level of recruits within 24 hours of their arrival at a service school was found to be only slightly higher than that of R.C.A.F. personnel who had been in the service for several months. Obviously the recommended intake of 75 mgs. per day was not being achieved by these individuals in civil life.

Accordingly a study of the relation of gingivitis to the intake of ascorbic acid and other nutrients^{5 6 7} was instituted in January 1942. Varying aspects of the problem have been studied during the ensuing three year period and these form the subject matter of this report.

CLINICAL APPEARANCE OF THE GINGIVITIS ENCOUNTERED

Acute and chronic inflammation of the gingivae of varying extent and degree was encountered in these studies. In this report no attempt is made to fit the various signs into previous classifications. Gingivitis as frequently seen by the authors is described and illustrated by colour photographs. For the purpose of this study the following classification is used.

Essentially normal gum tissue is shown in figure 1. The colour is light pink and there is no swelling or thick-

ening. The interdental papillae are pointed and extend well up between the teeth, the margins are thin, the surface is stippled and the tissues are firm in consistency. The gingival tissue has the appearance of being tightly attached to the teeth.

Changes which have been grouped as grade 1 are illustrated in figures 2 and 3. In figure 2 slight redness and swelling of an acute nature are evident, chiefly in the papillae (Footnote 2). Indications of this swelling are the loss of the normal sharp points of the papillae, their rounded appearance, shininess and apparent lack of attachment to the teeth. In figure 3 small areas of redness can be seen at the labial gingival margin of the lateral incisor teeth.

Changes which have been grouped as grade 2 are shown in figure 4. The redness and swelling have increased and usually both the papillae and the rest of the gingival margin are involved. Sometimes the area of redness will stop at a distinct line at a varying distance from the gingival margin, in other cases all the gingival tissue appears to be affected.

A more severe degree of involvement which represents grade 3 is shown in figure 5. Here the papillae have become greatly swollen and reddened. Both the papillae and the tissues at the gingival margin have become detached from the teeth and there is obvious pocket formation.

Still more severe degrees of involvement than those described as grades 1, 2 and 3 may be encountered. For example a rapidly developing Vincent's infection results in a severe degree of involvement with gum destruction. In our experience it usually occurs in gums that have already exhibited for many months a grade 1, 2 or 3 inflammation.

Footnote 1—The messing organization of the R.C.A.F. was changed early in 1942. The ration was changed June 1, 1942. Following this the ascorbic acid content of the food as served in all R.C.A.F. stations averaged 71.1 mgs. per day.

Footnote 2—Although the redness and swelling of the gingival tissues are typical of an acute inflammatory reaction the clinical course of the gingivitis would normally be classified as chronic as the appearance of the gum tissue varies only slightly over a period of weeks. The histological picture reported later in this paper is that of a mild chronic inflammation.



Fig. 1.—Essentially normal gum tissue—colour light pink, no swelling or thickening, papillæ pointed, extend well up between teeth.



Fig. 2.—Grade 1 gingivitis—slight redness and swelling of papillæ.



Fig. 3.—Grade 1 gingivitis—small areas of redness at gingival margin, most evident at the bases of the lateral incisors.



Fig. 4.—Grade 2 gingivitis—redness and swelling more marked. Both papillæ and marginal gingivæ involved.



Fig. 5.—Grade 3 gingivitis—marked redness and swelling of all gingival tissue.



Fig. 6.—Gingival changes in scurvy—gingival swelling largely due hæmorrhage in tissues. Free hæmorrhage from margin of right lateral incisor.



Fig. 7.—Chronic gingival changes—loss of papillæ and recession of gum tissue. Thickening of both marginal and alveolar gingivæ.



Fig. 8.—Bleeding—bleeding at gingival margin on measured pressure at base of papillæ.



Fig. 9.—Effect of local treatment—grade 2 gingivitis at beginning of study before local treatment. Compare with Fig. 10.



Fig. 10.—Effect of local treatment—same subject as Fig. 9 ten days after institution of local treatment.



Fig. 11.—Gingival deterioration—appearance of gingivæ at beginning of study after completion of local treatment. Compare with Fig. 12.



Fig. 12.—Gingival deterioration—same subject as Fig. 11 at conclusion of study. Note increased redness and swelling.

The above noted changes characteristic of acute inflammation of the gingivae can be readily differentiated from the gingival changes which occur in scurvy (figure 6). The swelling of scurvy is largely due to haemorrhage and the colour is usually a somewhat darker red.

In addition to the acute changes described above, evidences of chronic inflammation of the gingivae were frequently seen. In these cases the outstanding clinical manifestation is a thickening of tissue. The thickening may involve the papillae alone, the rest of the gingival margin, or all the gingival tissues. This condition can usually be differentiated from the acute reddened oedematous swelling previously described, as this thickened tissue is of a firm, cartilaginous consistency and is pale in colour. Loss of interdental papillae, usually the result of previous gingival inflammation, was encountered. Loss of papillae with thickening of the marginal and alveolar tissues is illustrated in figure 7.

All these changes have been described by Kruse.²

STUDY No. 1

In March 1942 a study¹ was begun to determine whether the administration of (1) ascorbic acid alone, (2) niacin alone, or (3) a combination of vitamins A, D, thiamine, riboflavin, nicotinic acid and ascorbic acid would have any effect in improving the gingivitis so frequently seen in R.C.A.F. personnel. Accordingly, 120 male personnel under 30 years of age suffering from grades 1, 2 or 3 gingivitis without complicating factors such as persistent mouth breathing, gross malocclusion, devitalized teeth and partial restorations were chosen. They were divided into four groups and observed over a period of five months. Group 1 received 375 mgs. of ascorbic acid daily (125 mgs. t.i.d.); Group 2 received 225 mgs. of niacin daily (75 mgs. t.i.d.); Group 3

received 45,000 I.U. vitamin A, 1,200 I.U. vitamin D, 9.9 mgs. of thiamine, 9.9 mgs. of riboflavin, 225 mgs. of niacin, and 300 mgs. of ascorbic acid daily in three divided doses. Group 4 received a placebo three times a day. No other treatment was given during the period of study. During the five months' period 27 men were lost from the study and the observations were completed on 93 of the original 120.

Complete medical and dental examinations were made at the beginning of the study and at monthly intervals thereafter. The men all appeared to be in good condition physically and the medical examinations did not reveal any abnormalities. At the time of each examination the gingival tissues were photographed in colour.

From the dental examinations and a study of the monthly photographs it was found that a certain number of the subjects showed improvement, some no change and others an increase in the swelling, redness and other signs of inflammatory reaction. The numbers showing improvement however, were no greater in the groups receiving vitamin therapy than in the controls.

STUDY No. 2

In 1943 a study¹ of 76 R.C.A.F. personnel was undertaken to determine the effect of various levels of ascorbic acid intake on the recurrence of signs of inflammation of the gingivae among individuals who had received local treatment to remove as far as possible all clinical evidences of gingivitis. Twenty-two individuals who for 6 months were on a diet containing 62 mgs. ascorbic acid and 25 others on the same diet plus 375 mgs. ascorbic acid in tablet form daily showed less evidence of recurrence of inflammation than did a group of 29 individuals on a diet containing 10 mgs. ascorbic acid for the same period. The subjects who received the additional 375 mgs. showed no less evidence of recurrence of inflammation than the subjects re-

ceiving only food containing 62 mgs. ascorbic acid.

The results of this study were such as to indicate the desirability of repeating and elaborating the work. Also at this time Dr. B. S. Platt of the Medical Research Council, London, England, suggested including in the projected study a group receiving food containing 25 mgs. ascorbic acid daily, this being approximately the level consumed by the civilian population of Great Britain at that time. Accordingly a third study was begun in April 1944 and continued for a period of 8 months.

STUDY No. 3

Procedure

One hundred and fifty R.C.A.F. personnel, all under 30 years of age, both male and female, were chosen for this study because all had a mild or moderate degree of gingivitis without other complicating factors such as gross malocclusion, persistent mouth breathing, devitalized teeth or partial restorations. They were apparently normal individuals carrying on their regular duties.

After the original oral examinations the subjects were classed as having grade 1 or grade 2 gingivitis and the subjects of the same grades were distributed as evenly as possible among four groups to be described later. At the outset a photograph was taken of the lower anterior gingival region of each subject, using the R.C.A.F. Ophthalmic Camera with a Kodatron power pack and bulb for illumination.⁸ The camera was adapted for the oral photographs by the addition of a precision head-piece which, by means of calibrated rods at each ear, the base of the nose and the top of the incisor teeth, permitted the head to be placed in an identical position for the original and all succeeding photographs. In addition a small amount of plastic material was placed between the molar teeth and allowed to harden

before the first photograph. This mould was numbered and kept on file and was inserted in the same location for each succeeding photograph of that individual, and the positioning of the teeth was thus standardized. The film used was the recently developed Ansco Colour Film. In order to avoid any possible variations from one batch to another all of the film used came from one batch. Processing of the film was done by the R.C.A.F. photographic division.

The individuals in all groups were then subjected to a local treatment^{9 10} which had been devised by the dental officers associated with this study to remove as rapidly and completely as possible all evidences of inflammation of the gingival tissues. Briefly, the treatment consists of the use of a displacement pack composed of powder and a liquid mixed together to form a thick paste. The paste is, applied so as to fill in the gingival crevices, which are almost invariably present, and, by an outward displacement of the soft tissues, to eliminate each crevice. The pack is retained in place for a period of 48 hours and an additional application made if necessary. The desired result is the complete elimination of all crevices and exposure of subgingival calculus after removal of the pack. At the conclusion of the treatment with the pack the calculus is removed and the teeth polished. The patient is instructed to maintain cleanliness and provide for additional stimulation of the gingival tissues by the use of tooth brush and inter-proximal cleansers. The lower anterior gingivae of all subjects were treated in this manner. The use of inter-proximal cleansers was discontinued however, after 6 days. Figures 9 and 10 illustrate the change produced in the appearance of the gingivae by the local treatment during a period of 8 to 10 days.

In addition selection was made of two gingival papillae as nearly alike as possible on inspection from parts

of the mouth other than the lower incisor region and these were recorded. These two areas were also given the standard local treatment, and one week later one papilla was excised and placed in 10% formalin in 95% alcohol and sent to the laboratories of the Hospital for Sick Children for examination. At the conclusion of the study the remaining papilla was excised and treated similarly. A total of 94 cases afforded tissues for comparative histological study before and after dietary control.

Immediately after the local treatment had been completed the results were recorded and a second colour photograph taken of the lower anterior gingivae. The four groups were then started on their respective diets.

Group 1 received food containing approximately 10 mgs. ascorbic acid per day; group 2 food containing 25 mgs.; group 3 food containing 10 mgs. plus 70 mgs. ascorbic acid in tablet form, and group 4 food containing approximately 75 mgs. ascorbic acid.

Many precautions were necessary to ensure the desired ascorbic acid content of the food provided. A separate mess hall, complete with kitchen and staffed by 10 cooks, was set up and a supervising dietitian appointed (footnote 3). In this mess hall all the subjects in groups 1, 2 and 3 were fed. The subjects in group 4, whose food consisted of the regular station ration, were fed in the station mess hall.

The basic diet served to group 1 contained no citrus fruits or juices, tomatoes or tomato juice, fresh fruits or fresh vegetables and only enough vitamin C containing foods to provide approximately 10 mgs. per day. All canned fruits and vegetables served to this group were assayed for their ascorbic acid content before being included in the diet. No great difficulty was encountered in preparing most foods in such a way that only a minimum of ascorbic acid was retained.

The exception to this was potatoes. In potatoes which had undergone months of storage the ascorbic acid content was low (10 mgs. per 100 gms.) and was easily destroyed in cooking. In new potatoes, however, used within a month or two of harvesting, the ascorbic acid content averaged 30 mgs. per 100 gms. and was found to be singularly stable.

Group 2 received the same diet as group 1 plus enough raw cabbage salad to supply an additional 15 mgs. of ascorbic acid. This was a relatively simple procedure since the ascorbic acid content of the available raw cabbage was found to be quite constant at approximately 50 mgs. per 100 gms.

Group 3 received the same food as group 1 plus 70 mgs. of ascorbic acid in tablet form each day.

In order to control the ascorbic acid content of the food supplied to the subjects in the four groups samples of all foods as served were collected over a 5-day period at 2 to 3 week intervals throughout the 8 months of the study and were assayed for their free ascorbic acid content. Thus samples were obtained and assays performed on approximately 25% of all food served throughout the study.

The food as served was collected and placed in glass jars containing 3% metaphosphoric acid. These jars were stored in the refrigerator until completion of the 24-hour period ending at noon. They were then shipped by express to the laboratories of the Hospital for Sick Children where the assays were completed on the same evening. The determinations were done by adding an excess of 2:6 dichlorophenol-indophenol and the residual colour measured with the Evelyn photoelectric colorimeter. It was established that no significant loss of ascorbic acid occurred during the storage and transportation of this food.

Footnote 3—Section-Officer D. H. Baxter.

The food as served was also collected over a 5-day period at approximately monthly intervals and assayed for its content of thiamine, niacin, riboflavin, calcium, phosphorus, iron and total calories.

Clinical evaluations of bleeding and tenderness were made at monthly intervals, the examiners having no knowledge as to which groups the subjects belonged. The tests for bleeding and tenderness consisted of pressure on the gums at the base of the papillae of the lower incisor teeth with a probe-like instrument having a smooth, blunt end 2 mms. in diameter. The instrument was mounted inside a hollow handle and was so sprung that a pressure of one pound could be repeated at each application. The pressure was exerted at right angles to the surface of the gum tissue. If bleeding occurred the haemorrhage took place at the neighbouring gingival margin (figure 8). In regard to tenderness, the patient was asked whether or not the pressure caused pain. Usually however, if the gums were tender the subject would wince and attempt to withdraw his head.

Colour photographs were also repeated at the same time as the clinical examination. At the conclusion of the study the photographs were evaluated for redness and swelling; again the examiners having no knowledge as to which groups the photographs belonged.

Fasting blood plasma ascorbic acid determinations were made on all subjects at the beginning of the study and at approximately monthly intervals thereafter. The blood was obtained by veni puncture, preserved on ice, transported to the laboratories of the Hospital for Sick Children, and the determination completed approximately 12 hours after the specimen was taken. These determinations were also done by the 2:6 dichlorophenol-indophenol method.

In addition to the ascorbic acid plasma levels the ascorbic acid in the

white blood cells of the subjects immediately prior to the conclusion of the study was determined by O. H. Lowry.

It was not possible to exert a rigid control over the subjects and confine them to quarters throughout the duration of the study. Each subject however, was a volunteer and had offered to restrict the foods consumed while off the station to a list of low ascorbic acid containing foods provided. It is inevitable that some additional foods were eaten during this 8-month period, but the blood plasma ascorbic acid levels provided a check on the care with which the subjects were following the diet. Those whose plasma ascorbic acid levels were either too high or too low as compared with the average of their respective groups were interviewed and an effort made to discover any dietary cause of the discrepancy. If subjects in groups 1 and 2 had plasma levels above 0.4 mg.% on more than one occasion or an increase above 0.3 mg.% but below 0.4 mg.% on more than two occasions, they were discarded from the study. Also subjects in groups 3 and 4 who on more than one occasion had levels below 0.4 mg.% or on more than two occasions had levels between 0.6 and 0.4 mg.% were discarded. The cause of these variations from the average might be due to unusual vitamin C metabolism but were more likely due to the subject breaking diet. In either case the individual was considered unsuitable for the study.

In addition to the subjects lost from the study for the aforementioned reasons there were others who were posted away from the station during the course of the study and were unavoidably lost. The original 150 volunteers were divided into 4 groups as follows: Group 1, 38; group 2, 36; group 3, 36 and group 4, 40. Ultimately those who were considered to have faithfully followed the diet and who were observed throughout the entire study numbered 33 in group 1, 30

in group 2, 31 in group 3, and 26 in group 4.

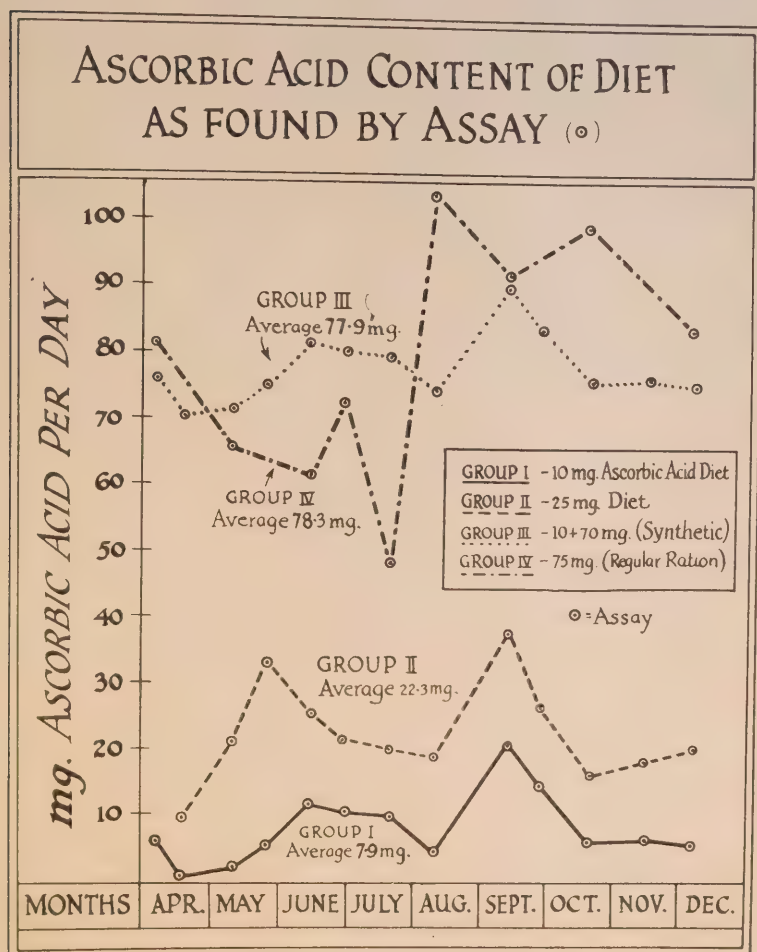
RESULTS

The results of the assays of the diets of the 4 groups for ascorbic acid are shown in chart 1.

It is to be noted that the average daily intake of ascorbic acid of the subjects in group 1 over the 8-months

period was 7.9 mgs., with a considerable increase above this average during the month of September. This is the period previously commented on during which new potatoes were obtained. The average value for group 2 was 22.3 mgs.; group 3, which consisted of subjects receiving the same diet as group 1 plus 70 mgs. of vitamin C in tablet form, showed an average

CHART 1



intake of 77.9 mgs.; group 4, who were on the regular station ration, received an average of 78.3 mgs.

The results of the assays of nutritional factors other than ascorbic acid are set out in table 1. As will be noted, the levels of intake of all nutrients with the exception of thiamine are equal to or above the recommended daily allowances.⁴ The average intake of thiamine is only slightly below the recommended daily allowance.

In chart 2 is shown the average fasting blood plasma ascorbic acid concentration in the 4 groups throughout the study.

In table 2, the average concentration of ascorbic acid in the white blood cells of the subjects in the 4 groups at the conclusion of the study is tabulated.

In table 3 is set out the photographic record of gingival redness or swelling before local treatment. It is seen from

TABLE 1

Assay of Nutritional Factors other than Ascorbic Acid in Food as served†
April - December 1944.

<i>Nutrient</i>	<i>Groups 1, 2 & 3</i>	<i>Group 4</i>	<i>Recommended Allowances*</i>
Thiamine.....	1.3 mg.	1.4 mg.	1.8 mg.
Riboflavin.....	2.7 mg.	2.7 mg.	2.7 mg.
Niacin.....	19.4 mg.	19.8 mg.	18.0 mg.
Iron.....	17.9 mg.	19.0 mg.	12.0 mg.
Calcium.....	1.5 gm.	1.3 gm.	0.8 gm
Phosphorus.....	1.6 gm.	1.6 gm.	
Calories.....	3082	2975	3000

†Average of food collected over a total of 35 days.

*The recommended dietary allowances of the Food and Nutrition Board, National Research Council, Washington, were revised in 1945 after the conclusion of this study, the Thiamine figure being set at 1.5 mg., the Riboflavin figure at 2.0 mg. and the Niacin figure at 15 mg.

TABLE 2

Ascorbic Acid Concentration in White Blood Cells at Conclusion of Study.

<i>Group</i>	<i>Average mgs. %</i>
1 (10 mgs. intake).....	11.9
2 (25 mgs. intake).....	13.2
3 (10 mgs.—70 mgs. synthetic).....	25.4
4 (75 mgs. intake).....	24.3

TABLE 3

Photographic Record of Gingival Redness or Swelling before Local Treatment.

	<i>Group 1</i>	<i>Group 2</i>	<i>Group 3</i>	<i>Group 4</i>
Grade 0 †.....	0	0	0	0
Grade 1.....	27	21	23	27
Grade 2.....	11	15	13	13
Grade 3.....	0	0	0	0
Total examined.....	38	36	36	40

†Zero grading indicates no redness or swelling.

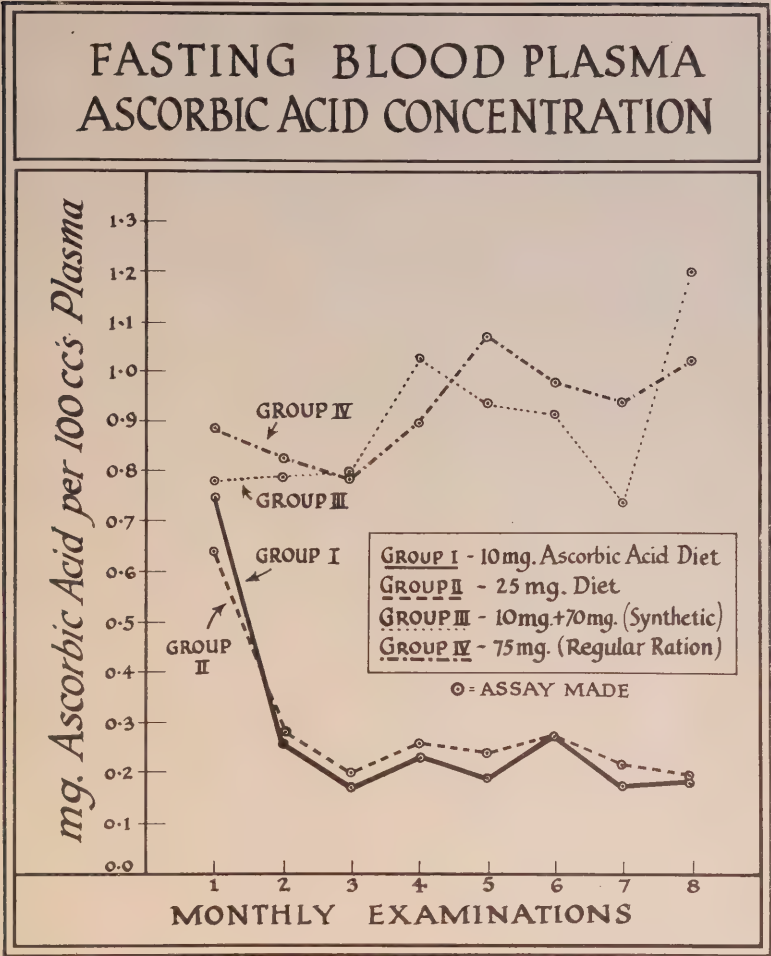


CHART 2

this table that all patients had evidences of what has been classified as mild or moderate gingivitis, that is, grade 1 or grade 2. The distribution of subjects with the same grade of gingivitis is fairly equal in the 4 groups.

In table 4 is tabulated the photographic record of residual gingival redness or swelling immediately after

local treatment of the lower anterior gingivae. The figures indicate that the residual redness and swelling are distributed approximately equally in all 4 groups. The figures given in this table when compared with those in table 3 also indicate that the local treatment employed was quite successful in either removing or reducing to a minimum the obvious evidences of

TABLE 4
Photographic Record of Residual Gingival Redness or Swelling
immediately after Local Treatment.

	Group 1	Group 2	Group 3	Group 4
Grade 0 †.....	23	22	23	24
Grade 1.....	14	14	13	15
Grade 2.....	1	0	0	1
Grade 3.....	0	0	0	0
Total examined.....	38	36	36	40

† Zero grading indicates no redness or swelling.

TABLE 5
Photographic Record of Gingival Thickening, loss of Interdental Papillae or Recession,
immediately after Local Treatment.

	Group 1	Group 2	Group 3	Group 4
Grade 0 †.....	1	0	0	1
Grade 1.....	31	27	31	29
Grade 2.....	6	7	5	10
Grade 3.....	0	2	0	0
Total examined.....	38	36	36	40

†Zero grading indicates no thickening, loss of interdental papillae, recession.

TABLE 6
Incidence of Gingival Bleeding, Tenderness, Redness and Swelling at Initial
(after local treatment) and Final Examinations.

Symptom	Examination	Group 1		Group 2		Group 3		Group 4	
		No.	%	No.	%	No.	%	No.	%
Bleeding	Initial.....	0	0.0	5	16.7	5	16.1	3	11.5
	Final.....	11	33.3	12	40.0	9	29.0	5	19.2
	Difference....	11	33.3	7	23.3	4	12.9	2	7.7
Tenderness	Initial.....	3	9.1	2	6.7	1	3.2	1	3.8
	Final.....	25	75.8	15	50.0	13	41.9	6	23.0
	Difference....	22	66.7	13	43.3	12	38.7	5	19.2
Redness	Initial.....	2	6.1	3	10.0	1	3.2	1	3.8
	Final.....	21	63.6	14	46.7	8	25.8	3	11.5
	Difference....	19	57.5	11	36.7	7	22.6	2	6.7
Swelling	Initial.....	14	42.4	10	33.3	13	41.9	11	42.3
	Final.....	22	66.7	14	46.7	13	41.9	8	30.8
	Difference....	8	24.3	4	13.4	0	0.0	-3	-11.5

APPENDIX A

TABLE 7

Subjects showing no Bleeding, Tenderness, Redness or Swelling on Initial Examination† and Final Examination.

Group	Number of subjects	No bleeding, tenderness, redness or swelling				No signs on both Initial and Final Examination*	
		Initial examination		Final examination		Final Examination*	
		No.	%	No.	%	No.	%
1	33	16	48.5	2	6.1	1	6.3
2	30	14	46.7	3	10.0	2	14.3
3	31	17	54.8	12	38.7	10	58.8
4	26	13	50.0	15	57.7	8	61.5

†After local treatment.

*Per cent of those with no signs on initial examination.

TABLE 8

Subjects showing more Redness or Swelling on Final Examination than on Initial Examination.†

Group	Number of subjects	More Redness		More Swelling	
		No.	%	No.	%
1	33	20	60.6	13	39.4
2	30	13	43.3	9	30.0
3	31	8	25.8	6	19.4
4	26	3	11.5	5	19.2

†After local treatment.

TABLE 9

Subjects showing Bleeding and Tenderness at any Examination.†

Group	Number of subjects	Bleeding		Tenderness		Neither Bleeding nor Tenderness	
		No.	%	No.	%	No.	%
1	33	21	63.6	28	84.8	5	15.2
2	30	18	60.0	20	66.7	5	16.7
3	31	13	41.9	17	54.8	10	32.3
4	26	9	34.6	8	30.8	12	46.2

†Excluding initial examination after local treatment.

TABLE 10

Incidence of Bleeding and Tenderness—All Examinations.†

Group	Number of examinations	Bleeding		Tenderness	
		No.	%	No.	%
1	222	61	27.5	99	44.6
2	199	46	23.1	56	28.1
3	210	44	20.9	40	19.1
4	170	27	15.9	27	15.9

†Excluding initial examination after local treatment.

gingivitis in the majority of the subjects (figures 9 & 10).

The photographic record of gingival thickening, loss of interdental papillae or recession immediately after local treatment is set out in Table 5. These signs are taken to indicate previous gingival inflammation. It is seen from this table that the four groups are also essentially comparable from this standpoint.

The incidence of gingival bleeding, tenderness, redness and swelling at the initial examination and the final examination is recorded in table 6. Further comparisons were made between the four groups in respect to the observed incidence of bleeding, tenderness, redness and swelling. Tables 7, 8, 9 and 10, setting out the essential facts are presented in Appendix A.

Figures 11 and 12 illustrate the changes seen in a subject in whom the gingival condition "regressed" or "deteriorated" during the period of the study.

About 4 months after the local treatment a red shiny localized lesion with a slightly gouged appearance was noticed on the gingival margins of a number of the subjects. Its position and extent was essentially the same as the reddened area on the gingival margin illustrated in figure 3. This lesion was referred to as a "crescentic lesion" and occurred with greater frequency in the subjects in group 1. In the course of 3 to 4 months it lost its characteristic appearance, with extension of the area involved. Box¹¹ called attention to this lesion in 1924.

As an aid to evaluating the results of the histological study the sections of tissues were placed in three grades according to the amount of ulceration, exudation, haemorrhage and congestion present. At the end of the study the grades were compared with the grades found at the beginning and the results were then used to attempt to predict the dietetic groups to which the various individuals belonged, which were entirely unknown to the patholo-

gist. No correlation with the dietary groups at all could be established, the results being quite at variance with expectancy.

In general no specific lesion which might be characteristic of lack of ascorbic acid could be recognized in the tissues studied. This was looked for especially in the structure of the blood vessel walls and in the character of the collagenous supportive tissues. Haemorrhage, when present, appeared to be connected with the changes consequent on inflammation rather than on any specific defect of the vessel wall. The blood vessels were often increased in number in the sub-epithelial layer and dilated, but their endothelial lining appeared normal. Haemorrhages were frequently seen but these did not suggest anything other than the haemorrhages commonly seen in the interstitial tissue of an inflammatory area. The collagenous fibrous connective tissue was usually well stained except in areas infiltrated with inflammatory cells, where it was quite obvious that ordinary toxic degenerative changes were in progress, which were shared by all tissue cells in the area. In a great majority of sections the cellular reaction consisted of cells of the lymphocyte series with a variable proportion of plasma cells; included also were a fair number of histiocytes. Only a comparatively few polynuclear cells were seen as a rule, except in those cases in which actual ulceration was in progress. The picture is thus one of a reaction to a comparatively mild stimulus acting over a long period of time. It is indistinguishable from that of mild chronic inflammation. The smaller percentage of cases in which polynuclear cells were prominent was consistent with an acute or sub-acute inflammation from any cause. — Numerous complaints were received from officers in charge that the men on the low ascorbic acid intake took a longer time on their repair jobs than before the study was started. A number of the subjects

themselves complained that they tired easily. For example, one man who was a runner stated he could not get in condition to compete in the track meet. The authors realize the possible psychological effect of the ascorbic acid restriction so are simply noting these observations as a matter of record.

DISCUSSION

Although it was impossible to correlate the histological picture with the dietary groups two useful points seem to be established. First, even when the local treatment removed all clinical signs of inflammation, the histological picture in many cases still showed evidences of a low grade inflammatory process. Secondly, careful study of the blood vessels and collagen failed to reveal a process which could be interpreted as suggestive of a lesion specific for lack of vitamin C.

It is of interest to note the average ascorbic acid blood plasma levels on different intakes of ascorbic acid (chart 2). It would appear that with an intake approximating 10 mgs. daily, the blood plasma level averages about 0.20 mg.%. Increasing the intake to nearly 25 mgs. daily does not result in a proportionate rise in the plasma level, the change being only from 0.20 mg. to about 0.25 mg. However, with an intake of about 75 mgs. the blood plasma levels range mostly between 0.7 and 1.0 mgs.%.

Similar results were obtained with the concentration of ascorbic acid in the white blood cells (table 2). Very little difference was found in the average levels of subjects receiving 10 mgs. and 25 mgs. of ascorbic acid daily; the level of those receiving approximately 75 mgs. being double. It may also be pointed out that after a low ascorbic acid intake over a period of months a definite relation becomes established between the ascorbic acid level of the white blood cells and the amount present in the plasma. As the white blood cells are probably representative of the

body cells in general, it can be assumed that if the ascorbic acid of the blood plasma is decreased over a period of months to the levels here recorded, the ascorbic acid will also be decreased in the body cells generally. These results bearing on ascorbic acid metabolism are being reported in detail by O. H. Lowry.

From the fact that the average blood plasma ascorbic acid levels were essentially the same whether the ascorbic acid was given largely in synthetic form (group 3) or derived from the food (group 4), it is reasonable to assume that the ascorbic acid administered in tablet form was well absorbed.

The findings recorded in studies 2 and 3 indicate that under controlled conditions the health of the gingival tissue can be affected by the level of ascorbic acid intake. Additional evidence bearing on this appeared in a recent survey in Newfoundland.¹² There among other nutritional deficiencies the ascorbic acid intake probably averaged less than 20 mgs. per day and gingivitis and involvement of other supporting tissues of the teeth was very frequently encountered. It was not uncommon for many people in their early twenties with no remaining teeth to state that they had removed many of their teeth simply by pulling with their fingers. In contrast to this, Platt¹³ states that in a study of the dietary habits and physical condition of many hundreds of people in the West Indies, whose diet, inadequate in many respects, contains a large amount of ascorbic acid in fresh fruit and vegetables, gingivitis was almost completely absent.

Considering the different intakes of ascorbic acid it is to be noted that gingivitis recurred most frequently in the group receiving approximately 10 mgs. daily of ascorbic acid derived from the food, next most frequently by the group receiving 25 mgs., then in the group receiving approximately 75 mgs. largely in tablet form, and finally, least frequently in the group

receiving 75 mgs. derived from the food. It should also be noted that in study 2 no more beneficial effects as measured by bleeding, tenderness, redness and swelling, were obtained when the subjects received food containing 62 mgs. of ascorbic acid with the addition each day of 375 mgs. in tablet form (or a total of 437 mgs. daily) than when the total was only 62 mgs. in the food.

It was recognized that the use of colour photography to check clinical changes was subject to limitations, despite the care taken and the many facilities available to the R.C.A.F. Minor photographic variations occurred which made minimal changes in the tissues difficult to evaluate. This was particularly true in the evaluation of swelling. In contrast to the difficulty in evaluation of any change in swelling and, to a much lesser degree, any change in redness by photography, it was felt that the results for clinical examination of bleeding and tenderness were obtained with a high degree of accuracy.

The experimental results are summarized in table 6 and tables 7 to 10 in Appendix A. In considering these data, it is important to keep in mind the fact that the four criteria used are arranged in order of reliability as follows: bleeding, tenderness, redness, swelling.

A certain amount of regression occurred in all groups, but the extent of this regression, measured in terms of numbers of cases with signs or in terms of increased severity of signs between initial and final examination, varies from group to group and is progressively smaller in order from group 1 to group 4. This orderly progression of percentages alone suggests that the observed differences between the experimental groups is unlikely to have arisen merely by chance. Statistical analysis tends to confirm this fact and

it is, therefore, reasonable to conclude that the observed differences are real in the sense that they would not be likely to disappear were the experiment repeated under the same set of conditions, though they might be of somewhat different size.

There was a significant increase ($P < 0.05$, e.g. less than 1 chance in 20 that the observed differences are due to chance) in the incidence of bleeding between initial and final examination in groups 1 and 2 only. A significant increase in the incidence of tenderness occurred in all groups (table 6). There was a very significant increase ($P < 0.01$, e.g. less than 1 chance in 100 that the observed differences are due to chance) in the incidence of redness between initial and final examination in groups 1, 2 and 3 (table 6). Only group 1, however, showed a significant increase in the incidence of swelling.

On initial examination (after local treatment), the groups were comparable in respect of the proportions with no symptoms or signs (table 7). On final examination, the proportion of cases with no symptoms or signs are arranged in the order groups 1, 2, 3, 4 (table 7). Cases in groups 1 and 2 showed a significant amount of regression, only 2 and 3 cases respectively having no bleeding, tenderness, redness or swelling on final examination. There was no significant change in groups 3 and 4. Further, the differences in the proportions of cases which were symptom-free were very significant ($P < 0.01$) for groups 1 and 4, 2 and 4, 1 and 3, and 2 and 3, but were not significant for groups 3 and 4, and 1 and 2.

The data thus indicate that cases in groups 1 and 2 were not as well maintained as cases in groups 3 and 4. While the observed differences are favourable in direction, the size of the groups is not sufficiently large to permit any statement as to the superiority of the diet of group 2 over that in group 1 or group 4 over group 3 in delaying the recurrence of gingivitis. Indeed the data as they stand suggest that group 3 fared as well as group 4, and group 1 as well as group 2.

The extent of the changes (extent and degree of recurrence of symptoms) occurring in the four groups between initial and final examinations is also reflected by the data contained in tables 8, 9 and 10 of Appendix A. A very significant amount of regression (in terms of bleeding, tenderness, redness and swelling) occurred among cases in groups 1 and 2 ($P < 0.01$). The changes observed in cases in group 4 were not significant. It is observed that deterioration of gingival tissues was significantly less among the cases in group 4 than among those in either group 1 or group 2. None of the observed differences between groups 3 and 4 were significant and the only difference between groups 1 and 2 and groups 2 and 3 which were significant was that for the incidence of tenderness on all examinations (Footnote 4).

In regard to the treatment of gingivitis the results reported in study would indicate that no clinical improvement is to be expected from the

Footnote 4—This does not mean that real differences do not exist. Differences in proportion must be of the order of 25% to be significant with groups of this size. In general, groups of 50 to 60 each would be required to make the differences between group 1 and 2 and between groups 3 and 4 significant at their recorded values.

administration of even large amounts of ascorbic acid over a period of 5 months. These findings are in accord with those reported by Stamm, McCrae and Yudkin.¹⁴ Kruse² states that the administration of ascorbic acid in large amounts for a year or more will improve conditions of the gingivae similar to those encountered in these studies. It was not practical in this work to attempt to test this statement.

It is common dental experience to have a recurrence of gingivitis even after thorough local treatment, which would suggest the existence of other aetiological factors increasing the susceptibility to inflammation. There is evidence³ that a considerable percentage of Canadians do not receive for at least 8 months in the year the daily intake of 75 mgs. of ascorbic acid recommended by the National Research Council, Washington. The results here recorded show that gingivitis recurs after local treatment more frequently in individuals receiving a low ascorbic acid intake than in those receiving a high ascorbic acid intake. From this it would appear that it is advisable in the treatment of gingivitis that the local treatment be accompanied by dietetic treatment. Cognizance should be taken of this fact by the dentist in the treatment of his patients and dietary directions given to ensure that they constantly consume a diet adequate in all essential factors including the desired amount of ascorbic acid.

The differences in the results recorded for group 3 who received the bulk of their ascorbic acid in tablet form and group 4 who received the same amount of ascorbic acid derived from food, are not statistically significant. The results recorded, however, suggest that further work should be done to determine whether there is not some additional factor in the food which enhances the action of ascorbic acid in preventing the recurrence of gingivitis.

The surveys performed during these

investigations on several thousands of young adults in an economic group probably higher than the average for this nation showed a surprisingly high prevalence of gingivitis. While the condition in its early stages possibly does not cause an appreciable amount of discomfort or impairment of health, this does not hold true as the disease progresses. Destruction of the supporting tissues of the teeth is stated to be the largest single cause for loss of adult teeth.¹⁵ In view of the high prevalence of gingivitis in young Canadians it is obvious that this condition should be of concern from the medical, dental and public health standpoints.

SUMMARY

The results of a series of studies conducted on R.C.A.F. personnel to investigate the effects of various nutrients on the incidence of gingivitis are reported.

Inflammation of the gingivae was commonly found among the apparently healthy young adults examined.

Study number 1 demonstrated that the administration of large amounts of vitamins A and D, thiamine, riboflavin, nicotinic acid and ascorbic acid for a period of 5 months had no clinical effect on pre-existing inflammation of the gingivae.

Study number 2 indicated, and study number 3 confirmed that when gingivitis was cleared to a maximum degree by local treatment the provision of approximately 75 mgs. of ascorbic acid daily had a delaying effect on the recurrence of signs of inflammation over that which occurred when 10 mgs. ascorbic acid daily was provided.

The results also suggested that a diet containing 75 mgs. of ascorbic acid (group 4) retarded the recurrence of gingivitis to a greater degree than 25 mgs. of ascorbic acid per day (group 2).

There was no significant difference between the effect of a diet containing 10 mgs. of ascorbic acid (group 1) and

one containing 25 mgs. of ascorbic acid (group 2).

The retarding effect on recurrence of gingivitis of a diet containing 75 mgs. of ascorbic acid (group 4) was not significantly different from that of a diet containing 10 mgs. of ascorbic acid plus 70 mgs. of ascorbic acid in tablet form (group 3).

The histological appearance of the gingival tissues encountered in these studies in no way resembled the changes seen in scurvy.

The authors desire to express their appreciation of the assistance given in these studies by Squadron-Leader F. H. Harvie, Squadron-Leader H. S. Dunham, Flight-Lieutenant S. A. Hopper, Flight-Lieutenant G. Manace, Major R. L. Twible, and Section-Officer D. H. Baxter.

The authors are also indebted to Wing-Commander A. H. Sellers for statistical analysis of the data and for advice concerning its presentation.

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"An important phase of medicine is the ability to appraise the literature correctly." — Hippocrates.

Blessed is the man who, having nothing to say, abstains from giving us wordy evidence of the fact. — George Eliot.

CHANGE OF ADDRESS

Notice of change of address should reach the Secretary's office before the first of the month in which the change is to take effect. Please furnish old as well as new address.

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A SIMPLE RADIODONTIC TECHNIQUE*

by RENE ROCHON, D.D.S., Detroit, Michigan, U.S.A.

AS dentists we all know that toothache can be seen coming on a long time before any carious lesions are visible; we also know that early discovery and constant care are still our most effective weapons against focal infection. This knowledge, however, is not common to dentistry alone. In 1934 an Associated Press news dispatch quoted and elaborated on Dr. Simpson's¹ statement that the early and complete use of radiograms in conjunction with caries and pyorrhea offered a means of prevention of two of the worst dental troubles of civilized man. Furthermore, Dr. Ennis² in an article entitled "Roentgenology and its Possibilities" climaxes the above opinion when he states that research has proven that a thorough full mouth x-ray examination of everyone seeking the services of a dentist is necessary and that to convince the patient of this is the inescapable responsibility of the practitioner. But how many of us make a complete x-ray survey for every patient? Yet, if it is the right thing to do, why do so many of us pass it up? WHY?—Because past training in radiography has made it difficult for many of us to overcome our own personal prejudices as well as our patient's resistance to the idea.

In the past most teachers and clinicians of radiodontics have stressed the necessity of a technique involving a great deal of time in order to produce results, on the first appointment, which to them could be considered adequate and final. There was no way out, most of them said, the time consumed in the making of a complete survey could not

be less than an hour or so. Such procedure was practical for the specialist. But when you and I, forced by circumstances, tried to apply these teachings within the half hour, our results were so frequently unsatisfactory that we decided that the all out practice of radiodontics for every patient was too involved and too time-consuming so we dropped patient education and continued on taking radiograms here there, now and then.

The best way to establish a custom is to teach it to young people; therefore, in our school³, we decided to teach radiography as it should be practised. This meant, of course, that clinic patients without exception must have a complete x-ray examination and that students not only learn to do but do all the radiography for their own patients. Our problems therefore, were the same as those of the practitioner and to us seemed just as insurmountable.

Despite the definite opinions of teachers with regard to time and results, we felt that there must be a way out. We were sure of one thing, which is, that to popularize the use of radiography in Dentistry we had to devise a technique which would produce a better complete survey within the half hour. We have succeeded beyond our expectations. Our control of the variable factors in the procedure has been so complete that not only can we produce rapidly radiograms of better quality on the first attempt, but, in the registration of anatomy, angulation being the only variable, rectification of errors becomes nothing more than a simple change in angulation; moreover, due to the ac-

(1) Detroit News, October 29, 1934.

(2) J.A.D.A., 21: 1367-1376, August, 1934.

(3) University of Detroit, School of Dentistry.

*Published concurrently with the Journal of the Michigan State Dental Society.

curacy of the technique, radiograms will be almost duplicates whether taken today, tomorrow, or next year, a requisite when one is desirous of determining accurately whether tissue changes are improving or getting worse.

Having in mind the economy of reading time we now present in outline form, wherever possible, the important steps in the technique which are indispensable to ultimate success.

THE METHOD AND ITS REQUISITE

Basic Principles Involved:—

1. The tissues to be interpreted must be registered in the centre of the packet.
2. The film packet must bear an accurate relationship to the region under inspection.
3. The angulation must be readily established and known at subsequent sittings.
4. The central ray must be directed to the centre of the anatomy to be registered.

In order to satisfy these requirements six factors are all important; none can be slighted. The technique is simple and accurate only through their synchronization; therefore, a careful application of each one will make for the best results. In view of such importance they could well be called the six necessities.

Necessity number one: *Definite Landmarks*—In the past, due to involved landmarks, as well as indefinite or complicated positions, the localization of the packet for the different regions was difficult to recall. In the present technique, however, there are only four easy positions to remember for a fourteen-radiogram survey. The following are the four landmarks that must be remembered; they are the same both for the maxilla and mandible. (Fig. 1).

1. Central incisor region: the median line.
2. Cuspid-lateral region: the interproximal space between the lateral and the cuspid.
3. Bicuspid region: the interproxi-

PLACEMENT OF FILM PACKET

SHOWING THE INDIVIDUAL AREAS UNDER OBSERVATION - MAXILLARY REGIONS -



• CENTRAL •



• CUSPID •



• BICUSPID •



• MOLAR •



- MANDIBULAR REGIONS -

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FIG. 1

mal space between the two bicuspids.

4. Molar region: the buccal groove of the second molar.

Necessity number two: *A Flat Surface and Easy Placement*:—To minimize distortion the film packet should present a flat surface parallel to the plane of the region to be radiographed and also be placed as close as convenient to the teeth to be registered in the interpretable part of the radiogram. In order to accomplish this, the film packet must be adequately relieved for each region presenting anatomic interference. A definite bending procedure, therefore, becomes a necessity not only to conform the packet to the anatomy of different regions and to keep the film-packet flat, but also to facilitate both the initial placement and the replacement of the packet in the same relative position at subsequent sittings. The suggested bends, of course, represent a general pattern suitable to 90% of conditions; in case of abnormalities of growth or occlusion, they will re-

quire modification in order to adapt the technical requirement to these unusual conditions. (Fig. 2).

Necessity number three: *A Marked Packet and Definite Patient Position*:—Definite markings have been inscribed on the film packet in order to facilitate its accurate placement; lines parallel to the edge of the packet mark off a border one-quarter of an inch on all sides, while vertical lines divide the film packet in half each way. We use a rubber stamp to mark each packet before use. (Fig. 3.). A definite procedure for patient position is outlined further on; the accurate head position for each region is given on the lower part of our angulation and time exposure chart.

Necessity number four: *Correct Angulation*:—Accuracy of reproduction requires that the mesio-distal and the vertical-horizontal angulations receive equal attention. When the packet is positioned so that it is parallel and presents a flat surface to the region to be radiographed, the mesio-distal

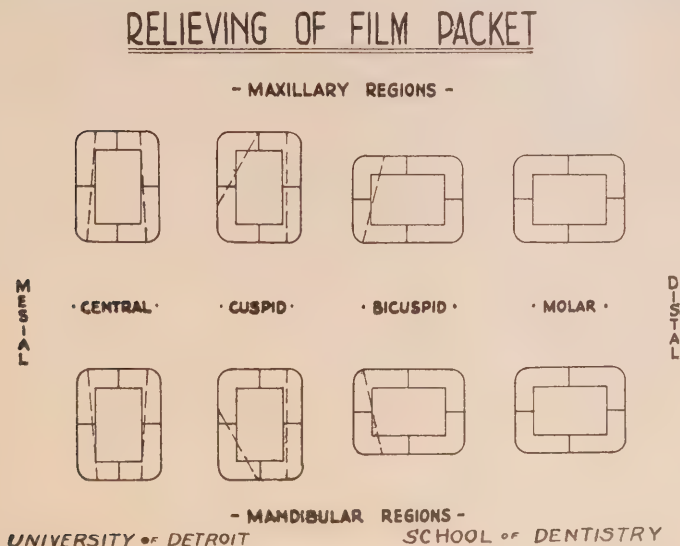


FIG. 2

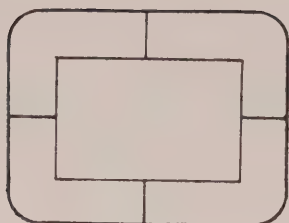


FIG 3

angulation offers little difficulty. Having obtained a parallel tissue-packet relation, always point the cone so that the central bundle of rays is perpendicular to the plane of the packet and the problem of mesio-distal distortion will be eliminated. To determine the vertico-horizontal angulation for individual regions, we recommend the use of an average angulation chart instead of the older method of bisecting and in finality guessing haphazardly again and again at the angle in order to correct previous errors in angulation.

The use of definite positioning in conjunction with an angulation chart, makes for more uniform results and

acts as a definite guide if retakes become necessary, because first, the angulation used is known in case of modifications; secondly, the patient-packet relation being definite, it can be reassured at subsequent sittings. Angulation alone remains as the variable; therefore, in case of error, corrections can be obtained by returning the patient to the recognized patient-packet relation and then modifying the angle to rectify the previous error in angulation. (Fig. 4).

The type of film to use is always a problem, and the question is asked: 'Should I use a regular film, or should I use one with a more rapid emulsion?' The answer to that question from a student's point of view at least, is that the regular film, the slow speed emulsion film, is preferred because of its greater latitude. An error of a quarter of a second on a speed film will produce serious faults in registrations; in view of the longer exposure an error of the same length of time with a regular film is of almost no consequence. For that as a main reason and for the reason that regular films have emulsion on one side only, thus

ANGULATION AND TIME EXPOSURE CHART

MAXILLARY

AREA	AVERAGE ANGLATION	SHORT ROOTS OR CROWN LINGUALLY INCLINED	LONG ROOTS-CROWN BUCCALLY & LABIALLY INCLINED	TIME IN SECONDS		
				AVERAGE TYPE	ATHLETIC TYPE	AGED-CHILDREN EDENTULOUS
ANTERIOR	40°	35°	45°	5	7	3
CUSPID	45°	40°	50°	5	7	3
BICUSPID	30°	25°	35°	5	7	3
MOLAR	25°	20°	30°	8	10	6
MANDIBULAR				N.B. INTERPROXIMAL RADIOGRAPHS REQUIRE 25% LONGER EXPOSURE TIME THAN PERIAPICAL		
ANTERIOR	-15°	PLACE TEETH IN VERTICAL POSITION ALWAYS		5	7	3
CUSPID	-20°	-15°	-25°	5	7	3
BICUSPID	-10°	-5°	-15°	5	7	3
MOLAR	0°	+5°	-5°	6	8	4

MODIFY THE HEAD POSITION FOR EACH REGION SO THE OCCLUSAL PLANE
OF THE TEETH IS PARALLEL TO THE HORIZONTAL PLANE
UNIVERSITY OF DETROIT SCHOOL OF DENTISTRY

FIG. 4

minimizing scratching of the film, we prefer to use the slow emulsion film usually called 'regular films.' An objection frequently raised is that the longer exposure will produce movement and therefore a loss of registration. Theoretically, this is true, but from experience with students patient movement has not been the problem which it is assumed to be.

Necessity number five: *Accurate Cone Placement*:—Point the cone first to the intersecting lines on the film packet which are seen extending from the teeth and then bodily raise or lower the tube head one-half inch for either upper or lower jaws. This will direct the central ray to the centre of the packet, where the tissues to be interpreted will be registered. As a check on the tube-film distance the tip of the cone should always touch the face.

Necessity number six: *Registration of Angulation and Variations for Each Region Where Corrections are Needed*. If the initial angulation is registered on the patient's chart, it will be known in case of error and if modifications are also registered at the time they are made, such corrections will be known when further radiograms are to be taken, enabling the operator to duplicate his best results.

RULES TO BE FOLLOWED

Principles engender rules and it is the application of such rules which brings about successful results. Following are the rules which make possible the practical application of the previously stated principles.

I. PATIENT POSITION

1. Place seat horizontal.
2. Back vertical, feet squarely on the floor-board.
3. Raise chair until patient's mouth is opposite axilla — always operate erect. It is more convenient, expedient and graceful.
4. Place head rest slightly above occipital protuberance to prevent movement.

II. MOUTH INSPECTION (spend less than one minute).

1. Determine height of palate, length and inclination of teeth; select approximate angulation and determine patient type, with regards to exposure. Record selected angulation and time on chart.
2. Note absence of teeth and also their malposition.
3. Seek evidence of disease, sore spots to prevent discomfort to patient.
4. Note presence of exostoses which may engender distortion, also presence of spectacles and partial dentures which should be removed.

III. FILM PACKET PLACEMENT

In the three anterior regions, place the line inscribed on the edge of the packet parallel and opposite the incisal edges of the two teeth to be radiographed. The bisecting line is placed opposite the proper landmark. In the bicuspid and molar regions, the line at the edge of the packet should be placed parallel and opposite an imaginary line drawn through the tips of the lingual cusps of the bicuspids or molars, the bisecting line as before should be opposite the landmark. If the above procedure is followed, the lines on the film-packet will act as a T-square and enable the placement and subsequent replacement of the film-packet in the same relative position each time a radiogram is taken of any region, assuring a faithful reproduction of every region from time to time. This will be possible because if you have followed the technique faithfully, you will have returned the packet in the same alignment, replaced the patient in the same recognized position, used the same angulation, given the same exposure, and directed the central bundle of rays to the centre of the packet.

IV. BENDING AND HOLDING INSTRUCTIONS

A. Bending Instructions:—

1. For cases presenting complications, determine the amount of bending needed by palpation or by attempting to place the unbent film into position, then bend packet accordingly. For cases presenting no complications, follow chart of average bending.
2. With fingers or cotton pliers, make necessary bends slowly.
3. Do not bend to an angle greater than 45° because the excessively bent portion will frequently remain unexposed and mar the radiogram.

B. Holding Instructions:—

Retention of the packet to many operators seems a real problem; however, if the general rule which is: "Hold the packet in the relieved area where resistance is met" is followed, retention of the film packet becomes a simple operation. The important thing to remember is that the packet should be held with only sufficient pressure to prevent displacement and that at no time the pressure should be so great as to cause either a horizontal or a vertical curvature of the packet. Such a curvature produces distortion.

In the molar regions both upper and lower, the packet should be held close to the crowns of the teeth because in the upper, compression in the middle of the packet will produce curvature in the vertical direction and in the lower, if held below the crowns of the teeth, the packet will assume a different position in relation to the teeth — a position which would require a considerable change in angulation, from the one indicated on the angulation chart. For all upper regions the thumb is used to secure packet in place while the index finger is used for the lower regions.

V. PROCEDURE FOR EACH REGION

1. Determine if there are any variations from angulation

selected from chart, set tube to proper angulation, record variation on patient's chart.

2. Set time switch.
3. Procure film packet, relieve if necessary.
4. Place packet in position with right hand, change to left hand to hold packet in place while guiding patient's hand to position to secure packet in place. Instruct patient to exert pressure on bent portion.
5. Place tube in position, point of cone touching. Check head position, film placement. This is a check on angulation, the only variable left.
6. Make exposure. Prevent movement by instructing patient to keep still.
7. Push tube head aside. Remove packet rapidly, reset time switch, change angulation if needed.
8. Wipe packet dry and place in safe box.
9. Operating Sequence:
Start with upper central region, alternate regions to right, then to left. It saves time; the angulation and patient position being usually the same for both sides, this procedure will eliminate 50% of the adjustments.

We have reviewed the principles of a technique which we consider most simple. Much time was needed to give an accurate description of it. So much that you may have gained the impression that it is greatly involved. It took more time to tell the story than it will take to actually produce results.

The mastery of a technique cannot be achieved by just reading about it. In things mechanical practice makes dexterity and as our technique is no exception to that rule, practice is also necessary to acquire proficiency in its use. We can guarantee success, because in the light of the results obtained by those who have tried it, we know that with little practice, the above

radiodontic technique will enable you to immediately improve on the quality of your present radiograms. Almost right away you will not only save time by doing your work rapidly, but with

care and precision in the application of the principles involved, you will be able, for all practical purposes, to duplicate radiograms from one sitting to another.

NATIONAL CONVENTION OF CANADIAN DENTISTS

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ANNOUNCEMENTS

Dominion Dental Council Examination

Dominion Dental Council examinations will be written July 15 to 20, 1946. Class A fees should be in the Secretary's office not later than May 20, and Class D, not later than April 20, 1946. A. J. Brett, Regina, Sask., Sec. Treas.

National Convention of Canadian Dentists, Housing Announcement

Plans are well under way for the Convention May 27, 28, 29 and 30, 1946. Hotel accommodation, while not under war-time restrictions, is still difficult. We are being treated generously and by May we expect hotel accommodation to be easier.

Those planning to attend are urged to apply for reservations at once. While we would wish for all to be housed in the convention hotel, accommodation may also be available in nearby hotels. Sharing a room with a friend is another suggestion we make. Your committee on housing promises to do its best to make your visit to Toronto most pleasant.

GLENN T. MITTON, CHAIRMAN, HOUSING COMMITTEE

86 Bloor Street West, Toronto.

University of Toronto, Faculty of Dentistry Post-Graduate Courses of Five Weeks' Duration

The first of a series of post-graduate courses of five weeks' duration began January 14, and continued until February 16, 1946 at the Faculty of Dentistry, University of Toronto; the second course is scheduled from February 25 to March 30, 1946.

These courses are designed primarily for graduates who have been serving in the Canadian Dental Corps and who intend to start or resume general private practice. Instruction will be given in the subjects of Operative Dentistry, Pedodontia, Periodontology, Prosthodontia, Dental Surgery and Anaesthesia, Preventive Orthodontics, Radiography and Ceramics (considered as one subject).

Three subjects may be selected by each applicant and instruction will be given on different days, twice a week, thus requiring whole time attendance during the five weeks. The daily hours will be from 9.00 A.M. to 5.00 P.M. except Saturday when instruction will end at noon.

The courses as planned will serve not only as refresher courses but will also embody instruction in the newer methods of dental practice and will prove helpful to dental officers who are about to commence or resume general dental practice.

The fee for three selected subjects of the course is \$150.00. Arrangements may be made for instruction in one or two subjects, but preference will be given those applicants who select three subjects.

In order to ensure adequate instruction, only a limited number of applications will be accepted. Communications concerning these courses should be addressed to the Dean, Faculty of Dentistry, 230 College Street, Toronto.

University of Oregon

The Alumni Association of the University of Oregon Dental School, Portland, Oregon, will hold a meeting in Portland on April 11, 12 and 13, 1946.

GEORGE W. REDPATH, PRES. OF ALUMNI ASSOC.

The Forum

PROBLEMS IN DENTURE SERVICE

by CARL O. FLAGSTAD, D.D.S.

Condensed from Fortnightly Review of Chicago D. Society, Dec. 15, 1945.

Dentists are masters of dentistry in proportion to their ability to overcome difficulties which arise in their practices.

Many of the difficulties which develop in denture service are directly traceable to faulty diagnosis by the dentist. In my experience I have seen many examples of denture troubles arising from failure to diagnose correctly and failure to inform patients.

The second problem the dentist must solve is the ability to guide and direct denture patients properly, especially through the important period of the transition from their natural teeth to the artificial ones. Until a dentist can accept denture troubles philosophically and can view people, no matter how uninviting their natures, as interesting studies whose solution is a pleasurable procedure, he will never know true joy in denture service.

The third problem the dentist must solve, and one on which hinges to a considerable degree his success in denture practice, is the possession of the skill and knowledge to deliver the service.

I might emphasize here that truly successful dentists are not salesmen of dentistry but doers of dentistry.

The successful use of dentures depends to a great degree upon the patient's ability to overcome habits which dislodge and interfere with their use, and the building up of habits favourable to their presence and use.

A dentist should become familiar with a patient's limitations in this respect so that he can wisely counsel him and govern his own endeavour.

There may be a misunderstanding concerning fees. The proper method for avoiding such a difficulty is to make the cost and terms clear at the outset.

There may arise a necessity for re-making the dentures or reconstructing them in order to secure a desirable result. Who shall pay for such extra costs? It usually falls to the lot of the dentist to absorb this expense, but his fees are so low that they will not permit such overhead. Therefore, he endeavours to make an inferior result serve the purpose; or he antagonizes his patient by suggesting an additional fee, or he remakes the denture at a loss which usually affects his morale and his attitude toward the patient.

Every denture fee should include an item for this kind of overhead so that when a case becomes a problem and a financial liability the cost can be absorbed by the surplus which has been built up for this purpose. The dentist will then approach the problem of reconstruction, breakage and rebasing in a more pleasant spirit.

Dentists must learn that it is impossible to service every prospective denture patient who visits the office. It is better to have your service rejected because you have painted a true picture of possible results than to have it accepted because you have

elevated the patient's hopes beyond the possibility of attainment.

There are certain types of mouth conditions and apparently certain kinds of tissue which will not develop a tolerance for dentures; consequently the patient is continually bothered with irritation. It is my opinion that tissue underneath the base of a denture undergoes a toughening process similar to what we term callouses on the palm of the hand which will develop by continually rowing a boat. This is especially evident along the periphery of dentures. In this connection the making of new dentures for elderly people frequently brings on difficulties because the tissue has lost its power to develop the necessary toughness and therefore there is continual discomfort. Frequently these patients cannot understand why new dentures should be persistently bothering when the old ones were so comfortable.

There is the problem of gagging: (a) Beginning gagging when dentures are first placed. This is readily overcome by persistency on the part of the patient. (b) Gagging which is caused from the construction or tipping of the denture. This can usually be overcome by the dentist. (c) There are a few cases of persistent gagging which seem impossible to overcome. I am satisfied that the type of denture construction will have very little effect in cases of this type.

There is the problem of a persistent

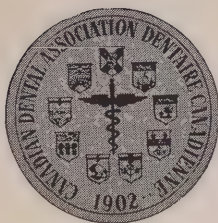
burning sensation. In my opinion this is a most acute problem for it seems on the increase and a cure in many instances is very uncertain. Burning sensations have been traced to the following causes: (a) Pressure from the dentures on certain sensitive areas. This is a very small group and is easily corrected. (b) Systemic conditions. We have found such diseases as diabetes and anaemia causes of burning sensation and the freedom from it in the mouth varies with the control of the disease. (c) Materials used in the dentures. We have found some people allergic to vulcanite and others allergic to resins which give the characteristic burning difficulties. This is also a very small number. Our best success in such cases has been to resort to a metal base. (b) There is a large number of these cases in which it seems impossible to discover the cause or a cure.

There is the problem of persistent tissue changes causing lost retention and destruction of tissue. It seems impossible to cope successfully with this condition, for the tissue continually changes so rapidly that one cannot keep the dentures in proper function.

The cure for this group of denture problems, which are seemingly impossible of solution must all be placed in the experimentation classification. Denture service for people with these difficulties should be accepted only on such a basis.

Too much moving of teeth and too little co-operation with nature in helping her to grow them into normal occlusion is the orthodontist's most prevalent mistake.
—Editor of Am. J. of Orthodontics.

The surface of our body is protected by epithelium. If a traumatic or operative wound occurs, an entrance of microorganisms into the interior of the body is possible; we cover that entrance with a bandage taking the utmost care to protect that entrance from invasion. The teeth normally close similar holes in the epithelium. However, the teeth themselves show defects through which caries may progress. It is the duty of the dentist to fight the invasion at the earliest possible stage. It is decisive not to lose the last battle but it is even better to win the first one. Let us safeguard the first line of defense by obstructing the invasion roads before they are used.—Bernhard Gottlieb, M.D. in Alpha Omegan.



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Editorial

NATIONAL CONVENTION OF CANADIAN DENTISTS

by **FRANK MARTIN, D.D.S., Toronto, Ontario**
President of the Ontario Dental Association

Having travelled about a bit in the East and seen some of the glories of the West I believe we have in Canada the most wonderful country in the world. What we do with it as a people to make it a great nation depends upon us. The time has long since passed for petty provincialism. One province cannot live unto itself and Canada be strong nationally. To quote from a recent address by Sidney E. Smith, President of the University of Toronto, a man with a breadth of experience of Canada and Canadians, "There is at hand for us a compelling example. It is being given to us by our men and women in His Majesty's uniform. They did not enlist as citizens of Ontario, Nova Scotia or Manitoba, or any other province, or as English-speaking Canadians or as French-speaking Canadians, or as old Canadians, or as new Canadians. They are fighting under one banner—that of Canada, and as Canadians all."

As Canadians we are not given to a lot of flag waving or idle boasting but I believe we are proud to say we are Canadian, no matter in what part of the world we visit.

To quote President Smith again "In industry and commerce, Canada, for a nation of less than twelve millions of people, has made gigantic strides.

Canada, in terms of population, is the thirty-fifth in the list of nations. We should keep in mind the facts of the case. Canada is first in the production of nickel, newsprint, asbestos, platinum and radium. In the supplying of foodstuffs for the United Nations Canada takes first place. Canada is the world's second largest producer of aluminum, woodpulp, and hydro-electric power. In the building of cargo ships Canada is second. In producing copper, lead and zinc Canada takes third place. She is the third trading nation in the world. Canada is fourth among the world's air power and fourth in the production of war supplies for the United Nations. Canada grows the world's greatest crop of wheat."

Bruce Hutchinson in his book "The Unknown Country" writes "A backward nation they call us beside our great neighbour—this though our eleven millions have produced more, earned more, subdued more, built more than any other eleven millions in the world."

Is there ground in that record for doubt and uncertainty, pessimism and frustration about Canada and her future? It does not seem so.

The professions, dentistry included, have kept pace with Canada's economic development. Graduates from our universities, can take their place, second to none, in any part of the world.

Due to the devotion and hard work of a group of Canadian dentists our thinking has been directed to the building of a strong national dental organization. Too much credit cannot be given to these men who have worked to bring this about. Their names will go down in the history of Canadian Dentistry.

In the past it has been customary for the Canadian Dental Association to join with regional dental societies in turn, as a guest, in joint convention. In May 1946 the Canadian Dental Association will meet in Ontario, at Toronto. It is the unanimous decision of the Board of Governors of the Ontario Dental Association to unite with it in a truly National Convention of Canadian dentists through joint collaboration in every phase of the meeting. A strong Convention Committee, chaired by Dr. P. G. Anderson, well and favourably known throughout Canada, has been set up and is working toward that end. It is proposed that all essayists and clinicians will be Canadians. It is the desire of the Committee to have every province represented as far as is possible. The Convention Committee feels that a program will be presented second to none and will be worthy of the name of Canadian Dentistry.

By this Joint Meeting, the officers of your Dental Associations hope to further the spirit of national thinking among the members of our Canadian Profession. The meeting will be your Convention no matter where you live in Canada. There will be something of value and interest to all with a distinctive Canadian touch.

Considerable time and thought is being spent by the Committee to form a working plan which may be used as a basis when the Canadian Association meets in joint session with other regional groups. It is hoped

that the formulated plan will save time and facilitate arrangements when other national meetings are being arranged.

The national Convention of Canadian Dentists is an effort to further strengthen ties in Canadian Dentistry. It has been suggested that the geographic structure of Canada has kept us in more or less isolated groups. That has been somewhat true in the past but a new day is dawning with the radio and air travel. Last week the writer had in his office four students who were all going home by air for their Christmas holidays, two to Western Canada, one to Newfoundland and one to Nassau, and in all cases just an overnight hop. Halifax and Vancouver are not so far apart today.

In conclusion let me again quote President Smith. "The reconciling of sectional and national interests is not merely as we often think a task for Governments—Dominion and Provincial. How prone we are to leave most of our problems to governments! Each of us has an opportunity at hand—this very moment—to contribute to the developing of a deeper spirit of national unity. That opportunity can be found in our business and professional affairs.

"We can observe strong bonds that are being woven across provincial boundaries by individuals and groups acting without governmental suggestion, support or direction."

Canadian dentistry will take its rightful place in the broader, national view, providing, of course, that every dentist makes his contribution as a Canadian.

BOOK REVIEW

Juvenile Dentistry by Walter C. McBride, D.D.S., F.A.C.D. Associate Professor of Operative Dentistry and Director of the Department of Pedodontics, School of Dentistry, Univ. of Detroit; with special chapters by James Nuckolls, D.D.S., F.A.C.D. Professor of Operative Dentistry, College of Dentistry, Univ. of California; C. Taylor Hall, D.D.S., F.A.C.D., Professor and Director of the Department of Oral Surgery, School of Dentistry, Univ. of Detroit; and Harold V. Dywer, B.S., M.D., F.A.C.P. Lecturer in Medicine School of Dentistry, Univ. of Detroit. Fourth Edition. Thoroughly Revised. 359 Pages. Illustrated with 298 Engravings. Published by the Macmillans in Canada, St. Martin's House, Toronto, Ontario. Price \$6.90.

The author aptly quotes Luther Burbank who in commenting on child welfare some years ago remarked, "If we had paid no more attention to our plants than we have to our

children, we would now be living in a jungle of weeds". We must all admit that juvenile dentistry has been sadly neglected by the rank and file of our profession. No other field of practice needs to be so emphatically stressed and Dr. McBride is particularly well equipped to discuss this problem owing to his years of experience in a practice devoted entirely to children over a period of twenty-one years.

The author has tried to simplify the matter of child management, to stress the practical side of operative procedures and to dignify the question of remuneration.

Certain modifications have been made in the fourth edition in order to bring the subject fully up to date and clarify the author's conception of what Children's Dentistry should be. The procedures have been developed to meet actual situations and demands have been described in an interesting manner.

The dentist who works for children should read this book,

M. H. G.

Essentials of Surgery for Dental Students by J. Cosbie Ross, M.B. (Hons.). Ch.M. (Liverpool), F.R.C.S. (England). Lecturer in Clinical Surgery to Dental Students, Univ. of Liverpool. Honorary Surgeon to Out-Patients, Royal Infirmary Branch of the Royal Liverpool United Hospital. Visiting Surgeon and Urologist to Smith-down Road City Hospital. Hunterian Professor, Royal College of Surgeons. 284 Pages. 196 Illustrations, 16 of which are in colour. Published by the Macmillans in Canada, St. Martin's House, Toronto, Ontario. Price \$6.00.

This book has been specially written for dental students about to embark upon general hospital practice. The following considerations have been featured: Basic surgical principles; conditions likely to be encountered by the dental student; an aim at brevity. The subject matter is the fruit of lectures and clinical teaching at the Univ. of Liverpool over a period of years.

The following subjects are discussed: Clini-

cal Examination, Lips, Tongue, Buccal Cavity, Salivary Glands, Hare-Lip and Cleft Palate, Alveolar Abscess, Osteomyelitis, Necrosis, Tumours, Temporomandibular Joint, Fractures, Plastic Surgery, Lesions of Face and Scalp, Neuralgia, Glands, Syphilis, Shock, Haemorrhage, Radium Therapy, and Diseases of the Nose, Pharynx, Larynx, Ear and Eye.

The book is written by a physician and some of the descriptions of dental problems could hardly be accepted by the dentist. For instance, it is stated that pyorrhea or periodontoclasia only becomes apparent in the middle-aged and elderly, further that the lower incisors are affected in the first instance, further that the gums in the earlier stages are hypertrophied, swollen and congested, all of which statements are not always true to fact in the opinion of this reviewer. Many of the diseases discussed are not the responsibility of the dentist as far as treatment is concerned, however the dentist should be able to diagnose many of them and a study of this book should help him to do so.

M. H. G.

DENTAL CORPS NEWS

HONOURS AND AWARDS

His Majesty The King has conferred Orders and Decorations on C.D.C. personnel as listed below:

MOST EXCELLENT ORDER OF THE BRITISH EMPIRE (O.B.E.)

To be Additional Officers of the Military Division of the said Most Excellent Order:

Colonel D. S. Coons, O.B.E., M.M., E.D.
Lt.-Col. E. Fraser Allen, O.B.E.
Colonel E. M. Wansbrough, O.B.E., M.M., E.D.

To be Additional Members of the Military Division of the said Most Excellent Order (M.B.E.):

Major A. H. Gunning, M.B.E.
Major D. M. Tanner, M.B.E.
Major Bertram Patrick Kearney, M.B.E.
Captain Harry Myer Jolley, M.B.E.
Lt.-Col. L. E. Kent, M.B.E.
Major F. W. B. Fitzgerald, M.B.E.
Major C. S. Lea, M.B.E.
Major W. H. Renwick, M.B.E.

AWARD OF THE BRITISH EMPIRE MEDAL

His Majesty has also approved the Award of the British Empire Medal (B. E. M.) to:

C-41794 S/Sgt. G. C. McIntyre, B.E.M.

The following have been Mentioned in Despatches:

Lt.-Col. C. B. H. Climo
Major S. K. Cougle
Capt. R. C. Cullington
C-97005 W.O.II (Q.M.S.) Davies, H. A.
M-63311 Cpl. Gebert, C. J. E.
F-87058 L/Cpl. Spicer, R. C.
D-106533 Pte. Brown, E. G.

SUPPLEMENTARY LIST, CANADIAN DENTAL CORPS OFFICERS

RETIREMENTS

Rank, Name and Date	Civilian Address	Rank, Name and Date	Civilian Address
Major V. C. Calkin, 15-11-45	New Glasgow, N.S.	Major K. C. Berwick, 29-11-45	Westmount, P.Q.
Major L. H. Cameron, 28-11-45	Antigonish, N.S.	Capt. M. Blanchet, 16-11-45	Rimouski, P.Q.
Capt. R. C. Crosby, 31-10-45	Dartmouth, N.S.	Capt. E. Blouin, 2-11-45	Quebec, P.Q.
Capt. L. S. Goldberg, 5-12-45	Halifax, N.S.	Capt. W. H. Bryant, 29-11-45	Westmount, P.Q.
Major G. M. Logan, 23-11-45	Halifax, N.S.	Major J. K. Carver, 9-11-45	Montreal, P.Q.
Major D. L. MacLean, 27-11-45	Cape Breton, N.S.	Major E. T. Cleveland, 2-11-45	Montreal, P.Q.
Capt. T. H. White, 26-11-45	Halifax, N.S.	Major F. A. Edward, 12-11-45	Montreal, P.Q.
Major T. H. Lewis, 5-12-45	Woodstock, N.S.	Capt. P. E. Genier, 4-12-45	Saint John's, P.Q.
Major H. H. Peters, 27-11-45	Saint John, N.B.	Capt. B. Gold, 6-11-45	Outremont, P.Q.
Capt. A. R. Smith, 25-10-45	New River Beach, N.B.	Major S. Hershon, 26-11-45	Outremont, P.Q.
Capt. G. C. Smith, 18-10-45	Saint John, N.B.	Capt. W. J. Johnston, 14-11-45	Montreal, P.Q.

Rank, Name and Date	Civilian Address	Rank, Name and Date	Civilian Address
Lt.-Col. L. E. Kent, 30-11-45	Lachine, P.Q.	Major W. C. McCutcheon, 8-11-45	Ottawa, Ont.
Capt. P. I. Labelle, 15-11-45	Montreal, P.Q.	Capt. F. W. McDowell, 27-10-45	Alliston, Ont.
Capt. L. H. Lang, 16-11-45	Montreal, P.Q.	Capt. H. E. McIntosh, 30-11-45	South Porcupine, Ont.
Capt. G. Lebeuf, 30-11-45	St. Jerome, P.Q.	Capt. L. D. Patrick, 23-11-45	Toronto, Ont.
Capt. J. A. MacDonald, 16-11-45	Montreal, P.Q.	Major W. W. Philp, 16-11-45	Toronto, Ont.
Capt. D. R. Mathieu, 16-11-45	Quebec, P.Q.	Major W. G. Preston, 21-11-45	Peterborough, Ont.
Capt. A. Oliver, 4-12-45	Outremont, P.Q.	Major W. H. Renwick, 3-11-45	Hespeler, Ont.
Capt. L. P. Reeves, 20-11-45	Montreal, P.Q.	Major H. C. Richards, 2-11-45	Hamilton, Ont.
Capt. D. T. Shizgal, 6-12-45	Montreal, P.Q.	Major H. E. Richmond, 23-11-45	Trenton, Ont.
Capt. R. C. Thompson, 9-11-45	Montreal, P.Q.	Capt. R. S. Robertson, 29-11-45	Corwall, Ont.
Capt. J. E. Van Vliet, 13-11-45	Montreal, P.Q.	Capt. N. L. Robinson, 28-11-45	Hamilton, Ont.
Capt. S. C. Ackland, 26-11-45	Mount Brydges, Ont.	Major F. M. Roulston, 21-11-45	North Bay, Ont.
Major R. H. Aljoe, 1-12-45	Toronto, Ont.	Capt. H. Shatsky, 7-11-45	Toronto, Ont.
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Capt. A. A. Antoni, 26-11-45	Cobourg, Ont.	Major N. L. Simon, 8-12-45	Hamilton, Ont.
Lt.-Col. J. J. Armstrong, 28-11-45	Toronto, Ont.	Capt. S. Simon, 19-11-45	Toronto, Ont.
Major C. E. Avery, 15-11-45	Toronto, Ont.	Capt. W. B. Smeaton, 4-12-45	Toronto, Ont.
Major A. A. Backus, 1-12-45	Chatham, Ont.	Major L. H. Smith, 9-11-45	Simcoe, Ont.
Capt. F. J. Bajurny, 20-11-45	Hamilton, Ont.	Major W. J. Smith, 8-11-45	Toronto, Ont.
Capt. H. S. Banfield, 1-12-45	Toronto, Ont.	Major S. E. Stacey, 26-10-45	Peterborough, Ont.
Capt. H. F. Black, 14-11-45	Toronto, Ont.	Capt. F. J. Stapleton, 29-11-45	Dublin, Ont.
Major R. W. Blackwell, 14-11-45	Kincardine, Ont.	Capt. C. A. Stewart, 21-11-45	Toronto, Ont.
Capt. G. A. Blanshard, 4-12-45	Freeman, Ont.	Capt. D. C. Stiles, 7-11-45	Sutton West, Ont.
Major J. W. Boyd, 16-11-45	Kitchener, Ont.	Capt. G. R. Stinson, 14-11-45	Toronto, Ont.
Col. G. L. Cameron, 8-11-45	Ottawa, Ont.	Capt. L. M. Sussman, 26-11-45	Toronto, Ont.
Capt. H. L. Cheney, 15-11-45	Alexandria, Ont.	Major A. B. Sutherland, 11-10-45	Toronto, Ont.
Capt. R. M. Clark, 13-11-45	Hamilton, Ont.	Capt. J. E. Verth, 4-12-45	Schreiber, Ont.
Capt. W. R. Clark, 15-11-45	Welland, Ont.	Major J. E. Thompson, 9-11-45	Barrie, Ont.
Capt. J. M. Clarke, 19-11-45	Belleville, Ont.	Major J. F. Warnica, 9-11-45	Hamilton, Ont.
Major H. C. Cobban, 22-11-45	Paris, Ont.	Capt. A. L. Williams, 7-11-45	Strathroy, Ont.
Capt. D. L. Coppel, 6-12-45	Toronto, Ont.	Capt. G. W. Willmott, 1-12-45	Georgetown, Ont.
Capt. F. E. Coulter, 22-11-45	Toronto, Ont.	Major A. H. Wilson, 30-11-45	Ottawa, Ont.
Capt. R. G. Cummings, 30-11-45	London, Ont.	Capt. E. L. Young, 7-12-45	Winnipeg, Man.
Capt. J. R. Drummond, 3-12-45	Petrolia, Ont.	Major J. P. Beattie, 12-11-45	Winnipeg, Man.
Major D. W. M. Duncan, 23-11-45	Petrolia, Ont.	Capt. M. F. Bennett, 24-8-45	Winnipeg, Man.
Major G. L. Finkbeiner, 9-10-45	Listowel, Ont.	Major A. H. Bernstein, 14-11-45	Winnipeg, Man.
Major R. S. Freelo, 17-10-45	Parkhill, Ont.	Major A. R. Ezard, 15-11-45	Winnipeg, Man.
Capt. A. E. Fyffe, 8-12-45	Niagara Falls, Ont.	Major S. E. Greenberg, 2-11-45	Winnipeg, Man.
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Major H. R. Hall, 19-11-45	Goderich, Ont.	Major M. Nacht, 13-11-45	Saskatoon, Sask.
Capt. H. M. Hamilton, 7-9-45	Stratford, Ont.	Major R. D. Reid, 23-10-45	Regina, Sask.
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Capt. J. G. Holbrook, 1-12-45	Hamilton, Ont.	Capt. O. S. Hauck, 20-11-45	Bodo, Alta.
Capt. L. E. Hubbell, 30-10-45	Lindsay, Ont.	Capt. L. S. Holmes, 27-11-45	Lacombe, Alta.
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Capt. G. N. M. Johnson, 7-11-45	Cannington, Ont.	Major H. M. McCaffrey, 1-12-45	Edmonton, Alta.
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Capt. J. C. Lackie, 4-12-45	Toronto, Ont.	Capt. A. H. L. T. C. Campbell	Victoria, B.C.
Major J. E. Lappin, 15-11-45	Toronto, Ont.	10-11-45	Victoria, B.C.
Major A. Lipson, 29-11-45	Toronto, Ont.	Major F. M. Corbett, 20-10-45	Victoria, B.C.
Capt. R. B. MacKenzie, 19-11-45	St. Catharines, Ont.	Major L. M. Coughlin, 29-11-45	Vancouver, B.C.
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Capt. J. C. Marrigan, 9-11-45	Deseronto, Ont.	Major A. H. Gunning, 31-10-45	Vancouver, B.C.
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Major J. D. McAsklie, 16-11-45	Woodstock, Ont.	Capt. A. G. Steed, 7-12-45	Vancouver, B.C.
Major F. D. McClure, 27-11-45	Toronto, Ont.	Capt. A. H. Verchere, 1-11-45	Port Alberni, B.C.
Capt. J. G. McCubbin, 29-11-45	Strathroy, Ont.		

When a man loses his health, then he begins to take care of it. — Josh Billings.

General education starts in infancy and continues throughout life, at least in the case of those men and women who are and who continue to be intellectually alert and intellectually omnivorous. — Prof. Anton J. Carlson in Science, April 10, 1942.

CANADIAN DENTAL ASSOCIATION NEWS

FROM THE OFFICE OF THE SECRETARY

Dental Diagnostic Services for Federal Civil Servants

A diagnostic dental service for members of the federal civil service is to be instituted. This service will consist of diagnosis to include radiograms and emergency treatment services only. Treatment services are to be performed by the family dentist.

The federal government being the largest employer in Canada is proceeding to set an example in health services of all kinds, including dentistry, for all employees. Clinics will be set up in Ottawa and various centres across Canada for the purpose and dentists will be engaged to perform these services. Accurate records will be kept which should form a valuable source of data respecting dental services for future reference. The family dentist will be left free to make his own diagnosis and render services as he sees fit. The service will be administered under the division of dental health of the department.

Survey of Dental Profession by Bureau of Statistics

There have been 752 returns received by this office up to December 26, 1945. They have been received from the provinces as follows:

British Columbia	77	approx. 24%
Alberta	43	" 26%
Saskatchewan	49	" 30%
Manitoba	59	" 30%
Ontario	368	" 26%
Quebec	108	" 14%
New Brunswick	12	" 13%
Nova Scotia	31	" 23%
Prince Edward Island.....	5	" 24%

Don W. Gullett, Sec. C.D.A.

Respecting Dental Services for Ex-Service Personnel

As you are well aware ex-service personnel are entitled to dental treatment services after discharge. Owing to the tremendous rush of applications resulting from the very rapid demobilization of the Armed Forces and inadequate accommodation for increased staff,

authorization for this treatment has been delayed.

Whereas the administration was at first undertaken at Ottawa entirely, it was soon found impracticable and decentralization was decided upon. In future these services will be administered through the District Supervising Dentist in D.V.A. districts across Canada. These district offices are now being established. A list of the District Supervising Dentists with their addresses follows this article.

Many ex-service personnel are worried in that authorization has not been received promptly. Answer should be made to such inquiries that if the application is sent in within the specified time, the applicant will be protected for recommended treatment privileges and authorization made as soon as possible.

In order to tide over this unavoidable delay in authorization of treatment, the policy of the department is to be altered in that any legally qualified dentist will, in the meantime, be permitted to render emergency services for Ex - service personnel without special authorization. Such emergency services are definitely restricted to *relief of pain and repair of dentures*. The dentist will satisfy himself before performing the services that the patient is a discharged person by observing the discharge papers or otherwise. When the emergency services have been performed the dentist will render his itemized account in duplicate, containing the patient's signature, rank and number, signifying that the specified work has been done, to the District Supervising Dentist of his district. The services are to be based upon the D.V.A. Fee Schedule, as published in the May, 1945 issue of this Journal.

Preference in referring patients for authorized dental service is to be given to Retired Dental Officers in respect to these services. However, District Supervising Dentists are given certain discretionary powers in matters relating to dental treatment in their own Districts.

The first consideration of the Department is to secure good dental services for ex-service personnel and the Association is most anxious

to cooperate toward this objective. We believe that the changes in administration now being established will facilitate the services toward that end.

DON W. GULLETT, Secretary.

List of District Supervising Dentists as of January 10th, 1946

- District "A"—Montreal.....Dr. J. W. Abraham
1 Youville Place, Montreal, Que.
- District "B"—Halifax.....Dr. G. M. Logan
Camp Hill Hospital, Halifax, N.S.
- District "C"—Ottawa.....Dr. W. H. Smith
607 Aylmer Bldg., Ottawa, Ont.
- District "D"—Toronto.....Dr. J. H. Duff
Prudential House, 55 York St., Toronto.
- District "E"—Quebec.....Dr. J. W. Rooney
15 Boulevard des Capucins, Quebec, Que.
- District "F"—London.....Dr. John Blair
Westminster Hospital, London, Ont.
- District "G"—Winnipeg.....Dr. G. A. Buchanan
Grain Exchange Annex, Winnipeg, Man.
- District "H"—Regina.....Dr. R. S. Rose
Regina Trading Co. Bldg., 12th Ave. & Search St.
- District "I"—Calgary.....Dr. E. E. Groff
New Col. Belcher Hospital, Calgary, Alta.

- District "J"—Vancouver.....Dr. R. W. Bradley
Shaughnessy Hospital, Vancouver, B.C.
- District "K"—Saint John.....(not yet appointed)
- District "L"—Hamilton.....Dr. L. Kilburn
Lister Bldg., James St. N., Hamilton, Ont.
- District "R"—Edmonton.....Dr. W. E. Addinell
University Hospital, Col. Mewburn Pavilion, Edmonton
- District "S"—Saskatoon.....Dr. H. S. Locke
London Bldg., Saskatoon, Sask.
- District "T"—Kingston.....Dr. A. A. Boyd
Post Office Bldg., Kingston, Ont.
- District "W"—Charlottetown.....(To be administered
from Ottawa in the meantime)

Attention, Golfers!

Where are all those golf cups you have won in past years? Your golf committee would appreciate knowing where the cups are. Write and tell us you are returning with them for our super-doo-per golf tournament to be held on May 27, 28, 29, 30. Your game to be played, at your time, on any of the three days, Monday, Tuesday and Wednesday.

R. P. LOWERY,

Chairman Convention Golf Committee.

NEWS FROM THE PROVINCES

ONTARIO

Who's Doing What In London Dental Society

The executive for 1945-46:

Past President.....Dr. H. G. Marshall
President.....Dr. J. A. Gillies
Sec. Treas.....Dr. S. A. Moore
Members.....Dr. C. M. Snelgrove
Dr. A. R. Davidson

At our first meeting Dr. S. M. Kennedy, Dean of London dentists, extended greetings of welcome to the ex-servicemen who were present. Dr. S. A. Moore is the Chairman of the Committee on Rehabilitation.

One of the features of London's activities takes the form of a Luncheon Study Group which holds its meetings at the Y.W.C.A. every second Thursday from 12.30 to 1.45 noon. It was primarily established for its academic value but it has in addition become a valuable medium for fraternization. Incidentally, could there be a greater justification for its continuation? Dr. J. A. Gillies is chairman

of the group this year. A patient was used by Dr. C. Rudell in presenting a clinic on the use of the rubber dam at our second study group meeting. Dr. J. F. Giffen led the third study group discussion on partial dentures. The paper given by Major Linghorne was reviewed by Dr. G. C. Squire at the fourth study group meeting.

The London Amalgam Group has been reincarnated under the convenership of Dr. H. R. Sykes.

Dr. H. G. Marshall is again Chairman of the Public Health Committee having as members Drs. Fuller, Sykes, McCutcheon and Giffen.

A special meeting of the Society was held on December 10, for the purpose of discussing the history and present set-up of school dentistry in London. A letter was sent to the Board of Education pointing out the absolute necessity of appointing a dentist to head and administer the department of dentistry in schools. Weird as it may seem in this 20th century an M.D. holds this position at present.



J. A. GILLIES, D.D.S.
President, London Dental Society

To those of our friends who have persisted and have read thus far, we shall reward by telling them that our moral status was checked by the Padre of Westminster Hospital, Rev. Mr. Manley. We report in due modesty a 100% rating!

Our 1945-46 cycle was inaugurated on November 10 at a dinner meeting in Hotel London. Dr. R. J. Godfrey the visiting clinician used three mediums, essay, table clinic and film to convey, embody and colour his seed ideas on the subject of "Surveying, Designing and Planning Removable Partial Dentures." Dr. Godfrey placed emphasis on the necessity of developing a standardized procedure which requires the usage of surveying instruments. It was shown that the technique for designing removable partial dentures has definitely evolved from the realm of "luck or chance" and now follows definite laws of physics. The establishment of this scientific basis, meaning of course that definite results follow definite procedures, removes all conjecture and apprehension and it logically follows that "every step may be seen and its effects upon the finished casting anticipated and predeter-

mined." Recurrent emphasis was placed upon the advice "Partial dentures should be planned by dentists" and certainly many intelligent reasons were presented that proved the point.

The whole presentation was skilfully handled in an impersonal manner and it was apparent that no attempt was being made to use the subject of Partial Dentures as a mere vehicle to present R.J. Godfrey, D.D.S., B.Sc. (Dent) of Toronto, Ontario.

Major W. Linghorne of the Canadian Dental Corps presented an essay on the subject of "Periodontitis and Vincent's Infection" at our second dinner meeting on December 1, in Hotel London. He enumerated the main factors causing the disease and submitted the details of diagnosis and treatment as used by the Canadian Dental Corps. The two aspects "before" and "after" treatment were illustrated by a series of coloured slides which certainly would seem to justify confidence being placed in its use. The magnitude of the problem facing Canadian dentists due to the prevalence of periodontitis and Vincent's infection was emphasized. In the army the treatment of Vincent's was ordered to be placed in the hands of dentists and the clinician suggested that this was the logical procedure to be followed in civilian life. However, full co-operation with the medical profession was desirable but definitely the specific oral treatment should be performed by dentists.

We noted the fact that our guest speaker generously gave credit to those who assisted in the evolution of the Canadian Dental Corps technique. We in turn congratulate Major Linghorne himself for having done a useful piece of research and presenting the results in a very interesting manner.

What further comments are required regarding our future programs other than to mention the names of the guests of honour?

Dr. O. S. Clappison—"Crown and Bridge Prosthesis."

Dr. Harold M. Vernon—History of Acrylics.

Dr. I. H. Ante—Full Dentures.

Dental Nurses' Alumnae Association of Canada

The January meeting of this association was held in the Royal York Hotel on January 8, and took the form of a "Bring a Friend

Night." Owing to the illness of our President, Miss Lois Mooney, our Vice-President, Miss Betty McCarter, took the meeting. Dr. Charles McLean supplied the entertainment for the evening by showing his very interesting moving pictures of Western Canada.

We are looking forward to having our president back with us shortly, so we say "a speedy recovery to you, Lois".

HELEN KRUGER

•

ONTARIO DENTAL NURSES' ASSISTANTS' ASSOCIATION

Ontario Benevolent Fund

The 225 patients of the Red Chevron Military Hospital were our guests at the Christmas party convened by Mrs. Leta Blaber. Miss Anne Kirkland drew lucky prize numbers and each patient was presented with a gift by Santa. A 35-piece orchestra supplied music. Mary McCollum and Bert Lanning were guest soloists.

•

Brantford Affiliated Association

Mr. Beaman, the guest speaker at the Brantford Affiliated Association meeting held on November 22, chose for his subject "Collections". During the evening the president, Miss Irene Douglas, resigned. She will be succeeded by Miss Alma Baker.

The members of Brantford Dental Nurses' and Assistants' Association met for their annual Christmas dinner at the Kerby House on December 4. During the evening Irene Douglas was presented with a farewell gift prior to her leaving for Toronto.

•

Hamilton Affiliated Association

The members of Hamilton Affiliated Association chose the Royal Connaught Hotel for their Christmas meeting when they were the guests of the Hamilton Dental Association. Dr. Dwight A. Ensign of the Henry Ford Hospital, Detroit, Michigan, was the guest speaker.

Kitchener Affiliated Association

On December 5 the Kitchener Dental Nurses' and Assistants' Association held a Christmas Party and White Elephant sale at the home of Miss Muriel Weber. After a social hour lunch was served by the hostess assisted by Miss Anne Kirkland.

•

London Affiliated Association

On November 14 the London Dental Nurses and Assistants met for dinner at Wong's Cafe. The business meeting was held at the offices of Drs. Giffen and Fuller. Miss Daisy Walker presided.

A very enjoyable Christmas dinner and theatre party were held on December 12. Novel place-cards and a gift exchange added to the merriment of the evening.

•

Toronto Affiliated Association

The Toronto Dental Nurses' and Assistants' Association held a business meeting on October 8. It was decided to give the Ontario Benevolent Fund Fifty Dollars, the proceeds from the showing of Dr. Wolinsky's films.

•

Windsor Affiliated Association

Miss Anne Kirkland, the president of the Ontario Dental Nurses' and Assistants' Association, was the special guest of the Windsor members at their Christmas party held at the home of Mrs. Louise Gawlin. During the evening they enjoyed many games and exchanged gifts. Delicious refreshments were served by the hostess.

RUTH JANKE

•

QUEBEC

Doctor Ernest Charron, Dean, Honoured.

On the occasion of the recent nomination of Doctor Ernest Charron, Dean of the Faculty of Dentistry of the Université de Montréal as Fellow of the American College of Dentists, the staff of the Faculty gave a dinner on December 22 at the Cercle Universitaire of Montreal.

The Professors and their wives were all pre-

sent. Among the guests of honour were: Monseigneurs Joseph Charbonneau, Archbishop of Montreal and Chancellor of the Université de Montréal, Monseigneur Olivier Maurault, Recteur, Honourable Mr. and Mrs. Alphonse Raymond, Chairman of the Administration Society of the University, Doctor Edmond Dubé, Dean of the Faculty of Medicine, Mr. and Mrs. Arthur Léveillé, Dean of the Faculty of Sciences, Doctor and Mrs. Joseph Nolin, Vice-Dean of the Faculty, Doctor Pierre Masson, Honourable Mr. and Mrs. Philippe Brais, Mr. and Mrs. Louis Casaubon, Mr. and Mrs. A. Stewart McNichols.

Speeches were delivered by Monseigneur Olivier Maurault, Doctors Paul Geoffrion, Chairman of the dinner, J. Lane Charpentier, Gérard deMontigny, and Ernest Charron.

A bouquet of roses was presented to Mrs. Charron.

Mount Royal Dental Society

On December 4 at the Mount Royal Hotel a "Welcome Home" dinner was tendered those members of the Mount Royal Dental Society who had been mustered out of the C.D.C.

An interesting program was arranged by the Post War Advisory Committee under the chairmanship of Dr. M. Toker.

High lights of the evening were the experiences related by those men who had served overseas.

The C.D.C. has rendered excellent service and we are justly proud of it.

Montreal Dental Club Annual Meeting

Dr. Arnold W. Mitchell was named President of the Montreal Dental Club at a meeting held Dec. 17, at the Mount Stephen Club. The election of officers took place following a dinner attended by 75 members.

Honorary memberships were conferred upon Dr. G. G. Armitage and Dr. E. C. Hutchison. Both these men have completed forty years in the practice of dentistry.

Dr. M. L. Donigan, convener of the Fall Clinic spoke of the success of the 21st. Fall Clinic held in October and told of plans for a bigger and better clinic in 1946.

A presentation was made to Dr. Robert Bell

as a tribute to his eight years service as club treasurer.

Dr. Bell reported that each Christmas during the war, parcels were sent to forty members of the club who were overseas. Every month 300 cigarettes were sent to members in the armed forces which to date totals 450,000 cigarettes.

Officers elected for the coming year are as follows;—

Past President	Dr. William Swetnam
President	Dr. Arnold W. Mitchell
President-elect	Dr. Robert B. Bell
Secretary	Dr. Ross Murray
Treasurer	Dr. C. R. Sellar
Executive	Dr. A. T. Donohue
	Dr. J. W. Gerrie
	Dr. W. G. Stockwell
	Dr. A. G. Racey
	Dr. J. Chamard
	Dr. H. H. Boyles

NOVA SCOTIA

Halifax Dental Society

On January 3 this Society, with the President Dr. F. W. Johnson, presiding, honoured Dr. W. H. H. Beckwith with a dinner and presentation held at the Nova Scotian Hotel. The occasion marked Dr. Beckwith's retirement after forty years of continuous practice. He has not, however, severed his connection with Dalhousie University where he has for years been Professor of Operative Dentistry. He also continues as President of the Nova Scotia Dental Board.

Dean Woodbury, Drs. W. C. Oxner, and S. G. Ritchie, in short addresses, reviewed Dr. Beckwith's career paying tribute to his professional worth, his hobbies, his optimism, and great sense of humour.

In replying, Dr. Beckwith expressed his sincere appreciation and the pleasure of associations which he had enjoyed for so many years.

Later, by courtesy of the Provincial Government three interesting films, depicting diversified subjects, were shown.

The attendance of civilian dentists was the largest we have ever had and a much enjoyed meeting closed by the singing of Auld Lang Syne.

BRITISH COLUMBIA

Vancouver Dental Society

The first meeting of the Society for the New Year was held in the Hotel Vancouver, January 8.

This meeting was primarily to welcome back into practice members who have been in the Canadian Dental Corps and was one of the best attended meetings the Society has ever had. A good percentage of those present were from the Corps serving at present and others now returned from service.

Dinner was preceded by cocktails provided by the C.D.C. members past and present. Friendships were renewed, and new ones made.

Lieut-Col. Eric Saunders proposed a toast to the King. Dr. A. Wark proposed a toast to the Corps of the last war, The Canadian Army Dental Corps. Dr. Wark's words were well chosen, giving some of the background and work of the Corps on the last war and recalling some of the men who have served in it. Dr. Wark's own son has been serving in the C.D.C. during this war, as has also Dr. Louie Campbell's son. No doubt this applies in many instances throughout Canada.

The speakers for the evening were Lieut-Col. E. Fraser Allen, O.B.E., Major Hamilton Simmons, and Major Murray McDougall. All of these men joined the Canadian Dental Corps at the first gun. Major Simmons had been in the artillery N.P.A.M. and transferred to the Corps through that source.

Lieut-Col. E. Fraser Allen was Assistant Director of Dental Services in the First Canadian Army. He was mentioned in despatches and awarded the O.B.E.

He spoke of the many aspects having to do with the background of the Corps, the period of waiting and training during and subsequent to the Battle of Britain, the educational methods followed, the training exercises in which the C.D.C. took part and finally the period from Normandy to Germany. The efficient method of supply during this difficult period and the fine dental service delivered to the troops during very difficult times, were stressed.

Major Hamilton Simmons was mentioned in despatches and spoke chiefly on his work in connection with No. 8 Canadian General Hospital particularly from a maxillo facial

standpoint. He told of the very great co-operation between the Medical and Dental Corps in handling jaw cases. Quick action in taking care of these cases and air transport to hospital in England saved many lives and prevented much disfigurement.

Dr. Murray McDougall while overseas became attached to the 1st. Canadian Corps of the 8th Army in Africa, Sicily, and Italy, and his experiences gave another aspect of The Canadian in the field. He told, as did the previous speakers, of the high regard in which the C.D.C. was held, and stressed the point that the Corps was in the most advanced position to care for the dental needs of the men.

This meeting was one that will long be remembered in the Dental Society.

Dr. F. W. Dyer a graduate of the University of Southern California and a former member of the C.D.C. was unanimously elected to membership.

The name of the Society was changed to the Vancouver and District Dental Society. This will take place at the end of the present season.

Another change was made through properly presented notice of motion, in that The Board of Censors became the Board of Governors.

Dr. Bradley, District Supervising Dentist of the D.V.A. explained the working of this department. He answered many questions and clarified a number of points in the operation of the department.

ALBERTA

Edmonton Dental Society

Dr. H. A. Gilchrist addressed this Society January 8 on the subject "Impressions and Impression Materials" discussing some of the more recent developments in these fields.

The President, Dr. J. D. Hawkins, presided.

SASKATCHEWAN

Regina Dental Society

This Society held its regular meeting at the Drake Hotel January 9. The guest speaker was Mr. T. M. Spencer of the Saskatchewan Department of Education. He spoke on "Guidance" with special emphasis as it re-

lated to our profession. Dr. G. Brett and Dr. I. Robb elaborated on Mr. Spencer's suggestions, re intelligence tests, for students planning to enter the dental profession.

The Society is happy to welcome home from overseas, one of its members, a past president, Capt. Don McFarlane.

Moose Jaw Dental Society

This Society reports the Officers for 1946 to be;—

President Dr. L. Gemmill

Vice-President ... Dr. F. Cooper

Sec. Treasurer Dr. W. Irwin

Dr. F. Muirhead was re-appointed as Lecturer in Odontology at the hospitals in that city.

Saskatoon Dental Society

This Society regrets to report the death of Dr. Milton E. Webb, January 9. His numerous friends will realize the loss to our profession and the bereavement to his wife and young family.

Dr. Joe Shacter who was in the D-Day operations was welcomed back to civic life.

Dr. M. H. MacDonnell of the Saskatchewan Dental Council led the Society in a discussion of the pros and cons of forming a Faculty of Dentistry at Saskatoon. There is the rumour that the Provincial Government contemplates

establishing a dental college. The local Society unanimously endorsed a resolution to ask the Provincial Council to ascertain certain information from Alberta, as to the salaries of professors, operating costs of the college, capital expenditures, difficulties of maintaining a competent staff, difficulties regarding clinical material etc. The Provincial Council would welcome the considered opinion of Canadian dentists.

MANITOBA

Manitoba Dental Association

The annual election of three members of the Association to the Board of Directors resulted in the re-election of Dr. A. R. Hurst of Brandon, and Dr. C. D. McLeod of Winnipeg. Dr. A. E. Proctor of Winnipeg who had been on the Board for 12 years and wished to drop off was replaced by Dr. W. A. Miller of Winnipeg.

Dr. Hurst was elected President and Dr. N. C. Carmichael who was appointed to fill out Dr. Garnet Leckie's term after his demise last April was elected Vice-President. Dr. J. F. Morrison was again appointed Secretary-Registrar and Treasurer.

Dr. H. J. Merkeley was appointed representative to the Canadian Dental Association, succeeding Dr. M. H. Garvin who has been the delegate for many years.

GENERAL NEWS

Medical Treatment of Indians

On November 1 the hospitalization and medical treatment of Indians was transferred from the Department of Mines and Resources to the Department of Health and Welfare under the Honourable Brooke Claxton. Dental health for Indians will consequently be administered under the division of Dental Health by the newly appointed officer, Dr. Janes.

Reestablishing Dental Practice

Joseph Bagdonas, in a detailed article on "Economic Considerations in Reestablishing a Dental Practice" in the A.D.A. Journal de-

clares that "the dentist starting practice in a smaller community will find it easier to gain recognition and to establish himself because he becomes a part of the total community. In the large city, he is merely a new name to most people, often living in a different part of the city from that where he practices."

The article reveals that dentists in cities of 500,000 population and over had a lower average net income than dentists practicing in communities of from 50,000 to 100,000.

—A.D.A. Journal

Future Dentists

A move in the right direction is the youth night that the Chicago Dental Society will

sponsor at a regular monthly meeting this spring. According to present plans each member will be urged to bring a young man or woman of talent and character who might be interested in studying dentistry. If he has no protégé of his own, vocational guidance directors in the Chicago high schools will be invited to provide one. The program will be directed toward stimulating a desire in the young people to become dentists. The three dental colleges in the city will hold open house during the afternoon and conducted tours will permit prospective students to observe dental education in action. Columbus and Cincinnati have conducted successfully "Father and Son" programs.

Bal

Watson Davis, Director of Science Service included Bal among the Big Ten most important scientific advances of 1945. During the war, the British discovered and developed an effective anti-arsenical, 2, 3, -dimercaptopropanol. The mixture has been called BAL (British anti-lewisite) and is an effective therapeutic agent against both the local and systemic action of certain arsenical war gases and is also of value in the treatment of types of arsenical poisoning encountered in civilian medicine.

The available data strongly suggest that BAL is effective in the treatment of patients with arsenical dermatitis, arsenical encephalitis and in individuals who have received a massive overdose of mapharsen. BAL has been given preliminary clinical trial in mercury poisoning and the results are most encouraging.

Penicillin Lozenges

by ROY B. WRIGHT, D.D.S., and
ROBERT W. RULE, JR., D.D.S.

—From *Journal of Cal. State D. Assoc.*

It cannot be stressed too emphatically that the results obtained from penicillin therapy in the treatment of oral infection generally are temporary in nature, leaving the various aetiologic factors to be dealt with if the disease is to be permanently controlled.

The value of penicillin therapy in the treat-

ment of acute oral infections is well established. Work is now being done in conjunction with curettement and other forms of treatment of the chronic type of periodontal pocket. It is anticipated that dosage forms for this work will be devised having greater therapeutic value than those now in use.

In connection with the work being done on these chronic cases, six minor gingivectomies were performed concerning lower molars with bifurcation involvements within the pathologic pockets. The usual procedure of employing a surgical pack postoperatively was dispensed with. Penicillin lozenges were prescribed instead. In each case the patient experienced no postoperative discomfort, the wounds healed with unusual rapidity, and were free from overgranulation.

Children's Dentistry

*Condensed from Editorial in Jour. of Mich.
S. Dental Soc.*

I had occasion to call at the office of one of our most prominent dentists, who has had, for a number of years a large general practice. In the waiting room there was a mother with a five or six year old boy who was the next patient. Shortly the door opened and another mother came out with a little child who had just been in the dental chair. When I had an opportunity to see the dentist he said: "You were surprised, weren't you, to see these children in my practice?" I had to say that I was. "Well," he said, "I have been greatly concerned over the fact that children are not getting adequate care in the usual dental office. I've thought about that problem a lot, and I have concluded that I have a definite obligation to the children of my patients if the parents wish it and are willing for me to do the work on the same basis as my work for adults. I realize this is not the solution to the whole child dental problem because private practice cannot or will not meet it. I can see no ultimate solution except public clinics for children. That is what we will have to work toward for I am convinced that it is the only logical and practical way."

Here is a dentist who did not say: "I won't think of it now; I'll think of it tomorrow." He thought the question through and came to certain conclusions and action. This is only one of a number of perplexing problems which

we need to think of today. Tomorrow may be too late.

Dr. Isaac Schour Returns from Italian Mission

Dr. Isaac Schour, head of the Histology Department at the University of Illinois, College of Dentistry, has returned to Chicago after a leave of five months, during which time he served as the dental member of the Italian Nutrition Mission, a group of scientists sent to Italy to study the effect of malnutrition on a large population.

Dr. Schour organized a dental research laboratory in Naples which promises to become a nucleus for continuation and stimulation of research by Italian dentists in that area.

Dental Materials

The returning dentist must exercise caution in the use of new drugs, chemical mixtures and mechanical devices, the Council on Dental Therapeutics of the American Dental Association warns in a report entitled "Changes in Drugs, Chemicals and Devices During the War Period."

The Council urges the judicious and limited use of sulphonamides and penicillin. "Because of the seriousness of their possible toxic effects and danger of sensitizing patients," the article points out, "the internal use of sulphonamides in dentistry should be limited to the treatment of deep-seated infections caused by the presence of sulphonamide-sensitive organisms . . . Since there is a potential danger of sensitization from the topical (local) application of sulphonamides, such uses in dentistry should be limited to those cases in which accessible infections are present or may be anticipated."

The article states that further studies are needed on penicillin to determine adequately its contribution to recovery from dental infection.

University Terribly Maimed

The University of Liège has suffered tremendous damage, both from the German flying bombs and the air bombings of the Allies. The School of Applied Sciences, the Institute

de Mécanique, the Institute of Civil Engineering and the seventeenth century abbey housing the Fatigue Laboratory were all badly hit. The School of Mineralogy with its collections was burned. The School of Business Administration with its library and collections was completely destroyed. A flying bomb wrecked the building containing the laboratories of pathology, bacteriology, pathological anatomy and medical chemistry, and another struck the Institute of Physiology and Biochemistry. Still another broke all the glass in Professor Bouillene's botanical conservatory containing a large collection of tropical plants, which were all killed by the winter weather.

The whole picture is one of a great university terribly maimed, with its faculty trying to hope and to carry on with no prospect of immediate succour.

The library situation is particularly bad.

The story of the University of Liège seems to have been one of considerable gallantry under conditions which must, many times, have seemed hopeless, followed by paralyzing destruction.

Brigadier Lott Retires as Director of Canadian Dental Corps.

As of January 31st, 1946, Brigadier Lott retires as Director of The Canadian Dental Corps and returns to Reserve Army Status.

Brigadier Lott has accepted the position of Director of Professional Research in the Research Division of the Dentists Supply Company of New York. He will take up his new duties immediately following his release from Military Service.

500 British Dentists Strike for Higher Fees

According to the Toronto Star of January 3, 500 British dentists scattered throughout Surrey, Dorset, Sussex, Kent and Hampshire, are refusing to supply artificial dentures to persons covered by national health insurance unless the government fee is raised from \$28.50 to \$47.25 per set. The dentists have agreed to supply dentures to ex-soldiers and returned prisoners of war. They state also that there is no intention to turn away insured patients who have teeth to be filled or extracted.

Relief for French Dentists

From October to date, dentists, supply houses and dental laboratories have contributed \$17,000 worth of dental supplies, including \$10,415.16 worth of porcelain teeth, to the Medical and Surgical Relief Committee for the use of the French Red Cross. The French dental profession has been almost helpless in its struggle to provide adequate dental care for the millions who so urgently need it, because of lack of instruments and supplies. Such materials as were not destroyed or lost through the accidents of war, were appropriated by the Germans. Some

communities were left without any means whatsoever of combating disease or alleviating suffering.

All those who can possibly do so, are urged to send any supplies they can, particularly porcelain teeth, and forceps, as the need is still great.

The Medical and Surgical Relief Committee, active in relief work since 1940, has donated \$761,348.50 worth of medical, surgical and dental materials to civilian and military organizations all over the world.

420 Lexington Ave.
New York City

When men speak ill of thee, so live that nobody will believe them. — Plato.

The greatest pleasure I know is to do a good action by stealth, and to have it found out by accident. — Charles Lamb.

There is a time in every man's education when he arrives at the conviction that envy is ignorance; that imitation is suicide; that he must take himself for better, for worse, as his portion. — Emerson.

IN MEMORIAM

Paul R. Stillman died in Florida, December 15, following a prolonged and painful illness, and was buried in Worcester, Mass., December 22. In the passing of this great dentist, our profession has lost a member who had a vision of the future of dentistry well beyond the large majority of his fellows.

His first love was periodontia and he was one of the founders of the American Academy of Periodontology. He had strong convictions and did not hesitate to express those convictions with the result that he had some enemies but many staunch friends.

Dr. Stillman's views on dentistry have been expressed in book form and in many articles in dental magazines including a number of articles in this Journal, some of which were written from a sick bed in Florida and all of which envisaged the highest ideals for the dental profession.

Dr. Stillman is survived by his widow to whom the Canadian dental profession extends its sincere sympathy.

A. E. Joselin of Windsor, Ontario, aged 69, died December 19, after a long illness. He was graduated from the Royal College of Dental Surgeons of Ontario and moved to Windsor eighteen years ago from Port Arthur.

He was a Past Master of Palace Lodge, No. 604, A.F. and A.M., and also a life member of that organization.

Dr. Joselin is survived by his widow.

James F. Gaynor of Bruno, Saskatchewan, aged 62, died November 15. He was graduated from the Chicago Dental College and practised in the town of Bruno for over twenty-five years, being forced to retire in 1944 on account of illness.



LT-COL. W. J. GIBSON

Lt.-Col. W. J. Gibson of Victoria, B.C., aged 48, died at the Vancouver Military Hospital on Dec. 28, following an illness of several months.

Lt. Col. Gibson, who practiced in Victoria previous to enlisting, was in command of the Canadian Dental Corps technical training centre at Toronto when he was taken ill. Previously, he was attached to Western Air Command Headquarters in Victoria. He served with the Canadian Army Dental Corps in the First World War from 1916 to 1919.

He was graduated in dentistry from the North Pacific College of Oregon in 1924, and since that time has fully devoted his many talents in the interest and advancement of better dentistry. His manner was sincere, modest and friendly and he provided inspiration and help to every dentist with whom he came in contact.

He served faithfully and well for many years on the Council of the College of

Dental Surgeons of British Columbia, was a past president of the B.C. Dental Association, the Victoria Dental Society, a member of the Vancouver Ferrier Gold Foil Study Club and the Seattle Porcelain Study Club.

Col. Gibson is survived by his widow, the former Matilda Crowther of Victoria.

Milton E. Webb of Saskatoon, Saskatchewan, aged 48, died January 9. He was graduated from the Royal College of Dental Surgeons of Ontario in 1922. Returning to Saskatoon, he was six months with the Red Cross, and then entered private practice.

He was a member of Knox United Church and the Board of Directors of the Y.M.C.A. He was a member of Saskatchewan Lodge No. 16, A.F. and A.M., the Royal Arch, the Preceptory and the Shrine, having been president of the Saskatoon Shrine Club.

Dr. Webb is survived by his widow, three children, and his parents.

Stanley T. Floyd of Toronto, aged 69, died at his home on December 28.

Dr. Floyd was graduated from the School of Dentistry of the Royal College of Dental Surgeons of Ontario in 1900. He practised his profession in Toronto since graduation. He did, however, volunteer his services to the Canadian Army Dental Corps during World War I and spent some time at Valcartier camp serving as a civilian dentist. In this connection his services were greatly appreciated.

Dr. Floyd was well-known for his philanthropic work in young peoples organizations in his native city. He was member of Christ Church, Deer Park.

He was an ardent sportsman being fond of riding. He was an active member of the Royal Canadian Yacht Club, Rosedale Golf Club and St. George's Society.

Dr. Floyd is survived by his widow, one son and two daughters. One son, Richard, was killed in action in March 1943.

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I. Frappier, D.D.S., Valleyfield

E. Laurin, D.D.S., Hull

A. Thérien, D.D.S., Shawinigan

A. Massicotte, L.C.D., Chicoutimi

V. Olivier, D.D.S., Sherbrooke

O. Desrosiers, D.D.S., St-Pascal

E. Venne, D.D.S., Grand-Mère

REDACTEUR

ALCIDE THIBAUDEAU, D.D.S., A.I.D.O.

516, est, rue Sherbrooke, Montréal.

FETE EN L'HONNEUR DU DOCTEUR ERNEST CHARRON

A l'occasion de la nomination récente du Docteur Ernest Charron, doyen de la Faculté de Chirurgie dentaire de l'Université de Montréal, les professeurs de la Faculté et leurs épouses se sont réunis pour dîner, samedi, le 22 décembre, au Cercle Universitaire, à Montréal.

L'objet de cette réunion était de célébrer la nomination du Docteur Charron, comme Fellow of the American College of Dentists et pour témoigner au doyen l'appréciation des membres de la Faculté pour le travail de réorganisation du programme d'enseignement de la Faculté de Chirurgie dentaire.

Parmi les invités d'honneur, on remarquait Monseigneur Olivier Maurault, Recteur, l'Honorable Monsieur et Madame Alphonse Raymond, Président de la Société d'administration, le Docteur Edmond Dubé, doyen de la Faculté de Médecine, Monsieur et Madame Arthur Léveillé, doyen de la Faculté des Sciences, le Docteur et Madame Joseph Nolin, Monsieur et Madame Louis Casaubon, le Docteur Pierre Masson, Monsieur et Madame A. Stewart McNichols, l'Honorable Monsieur et Madame Philippe Brais.

Des discours furent prononcés par Monseigneur Maurault, les Docteurs Paul Geoffrion, président du dîner, J. Lane Charpentier, Gérard de Montigny et Ernest Charron.

Une gerbe de roses fut présentée à Madame Charron par Mademoiselle Béatrice Hamel, garde-malade à la Faculté.

DR. GERARD DE MONTIGNY

Monsieur le Président; Monseigneur le Recteur; Monsieur le Président de la Société d'administration; Monsieur le Doyen, Mesdames, Messieurs:—

Les journaux de Montréal nous ont appris, il y a quelques temps, qu'un des nôtres, notre Doyen, avait été nommé Fellow de l'American College of Dentists et

nous sommes venus le féliciter de cet honneur qui lui a été décerné et qu'il a mérité grandement. L'American College of Dentists est tout simplement l'Association de tous les Dentistes américains, et il est dans la tradition de cette association d'accorder le titre de Fellow à ceux qui se sont distingués le plus dans le domaine de l'art, de la science, de l'éducation et de la littérature dentaires. Au Canada sur 5,000 dentistes, il y a une dizaine de Fellows. C'est dire qu'il y a beaucoup d'appelés mais peu d'élus.

L'American College of Dentists a voulu reconnaître ce que le Docteur Charron a fait pour la profession en général; nous le reconnaissons aussi certainement, mais nous voulons en plus lui exprimer, ce soir, notre admiration et notre gratitude pour ce qu'il a fait ici plus près de nous, à l'Université de Montréal.

Nous sommes à peu près au deuxième anniversaire de la réorganisation de notre Faculté. Le chemin parcouru, les changements accomplis, les résultats obtenus, tant au point de vue enseignement qu'au point de vue matériel, tiennent vraiment du prodige.

Evidemment, nous ne sommes pas sans nous rendre compte que ça n'a pas été le travail d'un seul homme; nous n'oublions pas que nous avons eu avec nous notre Chancelier qui a été notre soutien de tous les instants, notre Recteur, les Sociétés d'administration, je veux dire l'ancienne et veux dire aussi, celle qui lui a succédé. Qu'il me suffise de dire dans les quelques minutes qu'on m'a accordées, que les Membres de notre Faculté comprennent et savent l'immense dette de reconnaissance qu'ils doivent à tous ces Messieurs.

Mais, je veux en venir au Docteur Charron. Qu'a-t-il fait pour nous, et qu'aurions-nous fait sans lui? Chacun de nous peut apporter sa réponse et je voudrais offrir ici la mienne. Je crois que nous aurions fait relativement peu. Par lui, nous avons eu accès partout. Les portes nous ont été ouvertes et elles sont restées ouvertes. Notre Doyen a eu la coopération de tous, parce qu'il est l'ami de tous; l'ami de ceux mêmes qui sont loin de partager toutes ses opinions. Il a su faire travailler ses Collègues sans relâche parce qu'il a lui-même une volonté et une énergie qui ne se lassent jamais. Notre Doyen sait prendre conseil, ses idées sont larges, mais il sait ce qu'il veut, il a un programme bien défini. C'est pourquoi il a tant obtenu des autorités qui nous gouvernent et que nous avançons d'une façon si étonnante.

Monsieur le Président, avec votre permission, je voudrais soulever une toute petite question de race.

J'ai longtemps étudié le caractère de notre héros et pour trouver ce qui le rend si populaire, si aimable pour tous, ce qui fait de lui un succès, j'ai dû remonter très loin. A ses origines. Pour établir mon point, je mets, en cause tout un pays. Durant la guerre et à la fin de la guerre qui vient de se terminer, il y a une Nation qui s'est trouvée, peut-être, l'amie de toutes les autres Nations. Je pense à l'Irlande. Je ne sais pas si le Docteur Charron peut être quelquefois neutre, mais je sais qu'il est combatif et entre nous, il est de descendance Irlandaise.

Pour le bien de mon argument, j'allais dire que tout cela est tempéré par le sang canadien-français qu'il a dans les veines, mais je crois que ça ne serait pas très concluant et je laisse tomber ce point-là.

Le Docteur a un ami qui apparemment n'a pas conservé les belles qualités de la race, mais qui ne se cache pas d'être Irlandais puisqu'il a fait précéder son nom de famille, du nom de famille de sa mère, qui s'appelait Lane. Lane Charpentier, il me semble, que ça se porte assez bien. Le Docteur Charron, lui, n'a pas adopté le procédé, mais je vais vous dire pourquoi. Ses ancêtres du côté maternel s'appelaient Murphy. Murphy, c'est joli, Charron aussi est un beau nom, mais Murphy Charron... Il s'est dit: "C'est pas possible." Il a opté pour Ernest. C'est ainsi que nous le connaissons et que nous l'aimons tous.

M. le Président, et mes chers amis, dans quelques jours ce sera la Noël, et le temps des fêtes. Je fais maintenant mes souhaits à notre Doyen. En les formulant,

je pense à lui et je songe à nous-mêmes. Je demande à la Providence de donner à lui et aux siens, tout le bonheur qu'ils ont le droit d'attendre et je supplie cette même Providence de lui conserver la santé afin qu'il puisse longtemps encore nous guider dans la voie du progrès et de l'accomplissement.

Si notre passé n'a pas été sans gloire, lorsqu'il y a deux ans, le Docteur Charron nous a ralliés, nous étions quand même plongés dans l'obscurité de la nuit la plus profonde. Mais grâce à lui et à tous ceux qui nous ont aidés, le jour se lève, la lumière se fait autour de nous, nous voyons maintenant où nous marchons, dans le lointain l'horizon s'éclaire, et brille, et c'est là que nous allons. Là, nos Facultés soeurs seront contentes de nous; nous pourrons avec elles faire grandir et faire acclamer sur tout le continent américain le nom de l'Université de Montréal.

DR. JAMES LANE CHARPENTIER

Monseigneur le Recteur; M. le Président;

M. le doyen; Chers collègues; Mesdames et Messieurs:—

Le repas maigre, que nous venons de prendre, nous rappelle que nous sommes dans la période des Quatre-Temps et de plus dans l'Avant—, époque d'abnégation, de pénitence et d'humilité.

Nous n'avons pas crû devoir demander une dispense à notre chancelier, qui nous l'aurait sans doute accordée—il ne sait rien refuser à notre Faculté—parce que nous voulions laisser à cette fête l'esprit que l'Eglise nous suggère pour la préparation de la Noël.

Mais c'est bien là le seul caractère d'humilité de cette réunion, puisqu'elle est toute remplie de joie, de fierté et de réjouissance.

Elle a pour but de mettre à jour les progrès, qui se sont accomplis au sein de la Faculté de Chirurgie Dentaire, depuis que notre nouveau doyen a pris en main la direction de son enseignement.

Notre faculté a certainement fait quelque chose, puisque "l'American College of Dentists" vient d'honorer le docteur Charron, en lui décernant le titre de "Fellow".

Nous commençons à faire parler de nous aux Etats-Unis et pour employer le *language étatsunien*, nous dirons que l'Université de Montréal est maintenant sur la carte américaine.

Au cours d'un stage à l'Université Columbia de New York, en juin 1944, on me demandait souvent: "Vous êtes professeur à l'Université McGill, à Montréal?" Je répondais: "No. University of Montreal, the only French-speaking Faculty of Dentistry, in America."—On hochait la tête et on semblait dire: "Connais pas."

Cette année, retourné à Columbia, des professeurs inconnus me disaient: "Oh yes. University of Montreal. We hear that you're doing fine work, up there." Oui, la Faculté de Chirurgie Dentaire de l'Université de Montréal est maintenant connue chez nos voisins, depuis que le Board of Education of the State of New York a classé notre école dans la division "A", c'est-à-dire l'égale des grands centres dentaires du monde, comme Columbia, Ann Arbor, Northwestern, Illinois, etc.

Les Universités américaines ont les yeux sur nous parce que, de l'avis des délégués du Board of Education, nous réalisons, à la lettre près, le programme d'enseignement préconisé en 1926 et corrigé depuis par le Carnegie Foundation, après une étude sérieuse des plans d'enseignement dentaire au Canada et aux Etats-Unis.

Certaines de nos innovations, comme notre centrale de stérilisation et la division en comités de nos élèves de 3ième et 4ième années, sont à l'étude dans de grandes écoles dentaires américaines et seront imitées sous peu.

Des progrès étonnants se sont accomplis, chez nous, depuis deux ans. Ce succès ne veut pas dire que notre enseignement est parfait et que nous devons déjà nous arrêter, en regardant en arrière, sans jamais plus faire face à notre idéal.

Il reste beaucoup à faire, car ce n'est qu'après des années et des années de labeur, qu'une oeuvre, telle qu'une Faculté Dentaire, peut réaliser sa mission. Nous devons organiser notre service de recherches, nous désirons une bibliothèque fournie, nous avons besoin de chefs plein-temps dans tous les services, enfin nous voulons offrir à la population canadienne-française un corps professionnel plus compétent.

La période de temps, qui m'est allouée, ne me permet pas d'énumérer d'autres détails.

Laissez-moi dire à notre doyen, que le corps enseignant de notre faculté se réjouit de sa récente distinction, qui reconnaît son travail et son succès.

Le Docteur Charron vous dira peut-être, tout à l'heure, que l'honneur, dont il est l'objet, n'est pas décerné uniquement à sa personne, mais qu'on a voulu reconnaître l'esprit d'équipe et la bonne besogne des professeurs. Nous lui répondons d'avance:

"Vous êtes le chef responsable de la réorganisation de notre école. Tous ont bien travaillé, c'est vrai, mais vous avez su créer l'ambiance nécessaire à cette activité; vous nous avez stimulés, vous nous avez encouragés par vos conseils judicieux et par votre exemple soutenu."

DR. GERARD DE MONTIGNY

M. le Président; Monseigneur le Recteur;
Mesdames; Mes Chers collègues:—

Je suis très sensible à la délicate attention qu'ont eue mes collègues de la Faculté de Chirurgie dentaire de l'Université de Montréal d'organiser ce dîner à l'occasion de ma nomination comme Fellow de l'American College of Dentists.

Le présence de Monseigneur le Recteur, ainsi que du président de la Commission d'administration, me fait le plus grand honneur. Je suis très heureux aussi de voir parmi nous Monsieur McNichols qui a fait pendant plusieurs années de la Société d'administration et qui fut l'un des artisans les plus dévoués de la réorganisation de la Faculté de Chirurgie dentaire. Je désire saluer cordialement M. Arthur Léveillé, doyen de la Faculté des Sciences, et le Docteur Edmond Dubé, doyen de la Faculté de Médecine, ces deux Facultés qui nous rendent les plus précieux services en donnant à nos élèves l'indispensable enseignement de base, qui a tant contribué à faire classer dans la catégorie A, la Faculté de Chirurgie dentaire. On me permettra de rendre hommage au Doctor Joseph Nolin, qui a été non seulement le professeur, mais encore le guide et le conseiller de tous les étudiants qui sont passés par notre Faculté depuis la fondation, et qui a mérité le plus beau titre que l'on puisse donner à un homme, celui de père.

Il me fait plaisir de saluer aussi l'honorable F. Philippe Brais, professeur de jurisprudence chez nous, qui arrive à l'instant de Cincinnati, où il était l'hôte d'honneur du Barreau des Etats-Unis. Il m'est agréable de signaler la présence du Docteur Adélar Groulx, directeur du Service de Santé de la Cité de Montréal, et professeur à notre Faculté. Vous savez tous que le Docteur Groulx collabore très activement à nos campagnes d'hygiène dentaire et nous sommes heureux d'avoir l'occasion de lui en témoigner, ce soir, notre reconnaissance. Je n'ai pas besoin de vous présenter Monsieur Louis Casaubon, qui est de la maison, et qui nous est du plus grand secours dans les moments difficiles.

Je me rends bien compte qu'en m'octroyant le titre de Fellow, ce n'est pas à mes modestes mérites que le Collège des Dentistes des Etats-Unis a voulu rendre hommage. Il a entendu reconnaître par là, dans la personne du doyen, l'importance de l'oeuvre que nous avons entreprise, mes collègues et moi, et nous espérons mener à bien, grâce à l'étroite collaboration de tous les hommes de bonne volonté qui sont réunis, ce soir, autour de ces tables.

Ce dîner ne marque pas le couronnement de notre oeuvre. On veut bien reconnaître que nous avons franchi une étape importante, mais les résultats acquis ne

correspondent pas encore à toutes nos ambitions. Aussi voulons-nous voir, dans la manifestation de ce soir, l'attestation que nous sommes dans la bonne voie et y trouvons-nous un encouragement à persévérer.

Je ne saurais trop insister sur le prix que j'attache à la loyale coopération de mes collègues. C'est elle qui nous a permis d'obtenir, en deux ans, ces résultats qui, déjà, nous autorisent à fonder de grands espoirs sur l'avenir de notre Faculté. Le dévouement de chacun à la tâche commune s'explique par le fait que tous, nous avons conscience de travailler au progrès d'une institution qui est appelée à être de plus en plus utile aux étudiants qui la fréquentent et, plus tard, à la population qui aura recours à leurs services.

Animés d'une même ambition et nous proposant un même objectif, mes collègues et moi, et personne, je crois, ne me contredira—travaillons dans la joie, je pourrais même dire: dans l'enthousiasme. La tâche est souvent rude, nous éprouvons parfois de sérieuses difficultés, mais chacun n'en conserve pas moins sa bonne humeur. Quoi qu'en puissent penser les gens graves, j'estime que le sourire est un puissant facteur de succès, surtout dans le travail d'équipe. Nous faisons quelquefois des erreurs; mais, dès que nous nous en rendons compte, nous le reconnaissons de bonne grâce. Nous avons appris que les erreurs mêmes peuvent être profitables à ceux qui, mettant de côté leur amour-propre savent tirer parti de la valeur d'enseignement qu'elles comportent. Je crois que nous possédons un de la philosophie du vieillard à qui un jeune homme demandait:

—Vous, Monsieur, qui êtes un sage, voudriez-vous me dire d'où vient la sagesse?

—La sagesse, jeune homme, vient du bon jugement.

—Mais, Monsieur, d'où vient le bon jugement?

—Le bon jugement, jeune homme, vient de l'expérience.

—Sans doute, Monsieur, mais d'où vient l'expérience?

—L'expérience, jeune homme, l'expérience. . . Eh bien, l'expérience vient du mauvais jugement.

On ne saurait mieux démontrer que celui ne se tromperait jamais n'apprendrait jamais rien. Mais on trouve dans la collaboration un double avantage: on fait moins d'erreurs et, quand on en commet, on en tire plus de profit.

Mes collègues et moi sommes bien convaincus, cela va sans dire, que nos efforts conjugués seraient restés stériles sans les précieux concours que nous avons trouvés en haut lieu.

La Société d'administration de l'Université a toujours compris nos projets et n'a jamais hésité à nous seconder, dans toute la mesure de ses moyens. Nous avons trouvé auprès d'elle, aux heures les plus sombres, de l'encouragement et du réconfort. Nous croyons devoir lui rendre, ce soir, ce témoignage.

L'étroite collaboration du Collège des Chirurgiens-dentistes de la Province de Québec nous a été de la plus grande utilité. Son Conseil nous a accordé, en toutes circonstances, son appui le plus entier. Il nous fait plaisir de le proclamer publiquement.

Lorsque nous avons été convoqués par son Excellence le Chancelier, le 16 janvier 1944, nous lui avons exposé nos projets de réorganisation. Il a bien voulu les accepter et nous a promis nos concours sans réserves. Je désire déclarer ce soir, et je suis sûrement en cela le fidèle interprète de mes collègues, que son excellence ne nous a jamais ménagé ses sages conseils et qu'il a toujours été notre ardent avocat devant la Société d'administration qu'il préside.

Monseigneur le Recteur s'est toujours intéressé vivement à notre Faculté et n'a jamais hésité à seconder nos initiatives. Nous avons l'avantage d'être en contact quotidien avec lui, ce qui nous permet d'user et d'abuser de sa bienveillance. Je me retiens de dire tout le bien que je pense de Monseigneur Maurault, de crainte de

blessier sa modestie sulpicienne. J'ajouterai seulement que sa présence ici, ce soir, nous est très agréable.

On peut dire que l'honorable Alphonse Raymond est l'un des hommes qui ont le plus contribué, depuis 1937, au progrès de notre Université. Malgré ses multiples occupations, M. Raymond ne ménage ni son temps ni sa peine dans l'exercice de ses fonctions de Président de la Commission d'administration et de Vice-président de la Société d'administration. Si l'on pouvait lire dans sa pensée, on constaterait probablement que sa préoccupation principale, c'est l'avenir de l'Université de Montréal, c'est-à-dire l'avenir des nôtres.

Je manquerais à mon devoir si je ne remerciais pas les femmes des professeurs d'être venues à cette fête de famille où leur place était tout indiquée. Elles contribuent, elles aussi, au progrès de notre Université, en entretenant au foyer l'atmosphère sympathique dont le travailleur intellectuel a tant besoin, en s'intéressant à son enseignement et en prenant part aux initiatives d'ordre social ou artistique de notre Université.

DR. ERNEST CHARRON

Note Préliminaire Sur Une Nouvelle Technique D'analgésie Et D'anesthésie En Obstétrique

Par

MOISE CLERMONT, F.I.C.A., R.C.P. (crt), Chef du service d'Anesthésie à l'hôpital de la Miséricorde, Anesthésiste en chef de la Faculté de Chirurgie dentaire de l'Université de Montréal.

JACQUES GAGNON, Du service d'Obstétrique de l'hôpital de la Miséricorde.
Gagnants du Prix Casgrain et Charbonneau, 1945.

En résumé, la durée totale d'un accouchement nous a donné la moyenne de 14 heures 36 minutes répartie comme suit:

10 heures et moins	54 cas	36%
11 heures à 15 hrs	50 cas	33%
16 heures à 20 hrs	24 cas	16%
21 heures à 30 hrs	14 cas	10%
31 heures et plus	8 cas	5%

V. Un relâchement très prononcé du périnée au point que le taux des déchirures chez les primipares a été considérablement abaissé, et l'épisiotomie ne fut pas pratiquée chez bon nombre de patientes qui normalement en auraient nécessité. Le relâchement du périnée persiste six heures et parfois au delà, même si l'effet analgésique est disparu.

VI. A l'expulsion, l'enfant crie spontanément sauf les cas où il y avait eu association avec les barbituriques ou les opiacés. Par la suite, aucun trouble ne fut noté chez les bébés que nous avons pu suivre.

Le tableau suivant nous fait voir les constatations recueillies concernant les différentes conditions des bébés à la naissance:

a) Respiration spontanée et bonne condition du bébé	128 cas	86%
b) Respiration difficile	14 cas	9%
dont 11 cas: bébés endormis dus à des associations médicamenteuses.		
2 cas: dus à un travail laborieux dont une procidence du cordon.		
1 cas: dû à des sécrétions laryngées.		
c) Mortalité	8 cas	5%

Aucune attribuable à l'association pentothal-protoxyde d'azote-oxygène.

3 cas où le coeur a battu, mais où nous n'avons pu obtenir la respiration, malgré tous

les moyens utilisés. Il s'agissait 2 OIGP et 1 OIGP, où la période de dilatation a varié entre 18 heures et 36 heures de travail laborieux.

5 mort-nés, dont:

2 morts et macérés, dus à une intoxication maternelle: néphrite albuminurique.

1 anencéphale avec placenta prævia.

1 cas d'anomalie: imperforation anale, bec de lièvre.

1 hérédosyphilitique avec oedème généralisé, ventre globuleux.

VII. Chez quelques patientes, nous avons remarqué une légère diminution des contractions utérines, diminution due à une dose chirurgicale et non analgésique du pentothal sodium. Dans ces cas, il fut nécessaire de les stimuler afin de permettre au travail de procéder durant la période d'action du médicament.

VIII. Une légère chute de la pression artérielle d'environ 10 mm., qui remonte graduellement pour atteindre son niveau antérieur après 30 minutes.

IX. Aucun changement du côté de la respiration et absence de cyanose.

X. Aucune irritation ou inflammation de la muqueuse rectale.

XI. Sauf chez une cardiaque décompensée, cette technique a été utilisée chez toutes les patientes sans distinction de celles présentant des troubles hépatiques, rénaux, pulmonaires ou autres sans aucune complication.

Le tableau suivant nous fait voir un relevé, aussi fidèle qu'il fut possible de le faire, des maladies antérieures et concomitantes.

<i>Maladies antérieures</i>			
Mastoidectomie	1	Coqueluche	36
Diphthérie	8	Rougeole	65
Rhumatisme	6	Typhoïde	5
Endocardite chr.	8	Folliculite	1
Parotidite infect.	4	Pleurésie	3
Appendicectomie	22	Ovariectomie	
Périnéorraphie	2	partielle	2
		Scarlatine	15
		Varicelle	7
		T. B. ant.	1
		Pyélonéphrite	14
		Pneumonie	4
		Thyroidectomie	1

<i>Maladies concomitantes</i>			
Endocardite partiellement compensée	1	Syphilis	2
Goitre non toxique	3	Fistule anale	1
Carie dentaire	22	Amygdalite	4
Albuminurie marquée	8	Cystite	6
Hémorroïdes prononcées	1	Arythmie	3
		Laryngite	1
		Scoliose	1
		Neisser	19
		Fibrome	1

XII. Quelques cas d'hémorragie due à l'atonie du muscle utérin après l'expulsion de l'enfant. Systématiquement, nous avons donné $\frac{1}{2}$ c.c. d'infundin ou 1 c.c. de Pitocin après l'expulsion de l'enfant et 1 c.c. d'ergot après l'expulsion du placenta. Par la suite. 2 cas rebelles ont nécessité l'administration de coagulant i. v.

Le tableau suivant nous démontre la répartition de la perte de sang:

200 c.c. et moins ou physiologique	138 cas	92%
de 200 c.c. à 400 c.c.	7 cas	5%
de 400 c.c. à 600 c.c. et plus	5 cas	3%

XIII. Sub-involution dans quelques cas, où à l'expulsion nous avions utilisé d'autres anesthésiques que le protoxyde d'azote. Cet inconvénient a été vite contrôlé par l'administration, dès la deuxième journée, d'ergot per os. Nous devons dire cependant que ces complications, c'est-à-dire atonie du muscle utérin après l'expulsion de l'enfant et sub-involution utérine dans les suites de couches, sont survenues par association pentothal et éther ou mixture. Mais depuis l'association pentothal-protoxyde d'azote-oxygène, la perte de sang est devenue normale au moment de l'accouchement et les suites de couches, sans sub-involution utérine.

XIV. Dans deux cas, il nous fut nécessaire d'administrer un antidote: Coramine et picrotoxin i.v. (1 c.c.), bien que par la suite nous ayons constaté que les phénomènes

apparemment allergiques avaient été provoqués par des troubles gastriques, indigestion aiguë en l'occurrence.

Les principaux signes d'allergie sont: chute de la tension artérielle, pâleur de la face, rapidité et faiblesse du pouls, état syncopal, etc.

XV. L'association pentothal avec éther ou mixture n'a provoqué d'atonie intestinale post-partum. Par contre avec l'association pentothal-protoxyde-oxygène, nous avons remarqué une diminution du nombre des lavements évacuants durant les suites de couches. Parfois un lavement, peu souvent deux, le plus souvent aucun ne fut nécessaire.

XVI. De même pas d'atonie vésicale ne fut notée.

REMARQUES

Les doses fortes sont à déconseiller. L'un de nous, à la suite de Weinstein et Light, utilisa le pentothal sodium en instillation rectale comme anesthésique de base avant les opérations de grande chirurgie depuis plus de 2 ans. La dose utilisée est de 1 gm. par 50 lbs de poids environ. En obstétrique, ces doses sont trop fortes et nos constatations cliniques rapportées plus haut nous en donnent la preuve. C'est aussi l'opinion de Weinstein et Light et de Gwathmey, qui avec des doses de $\frac{1}{2}$ à $\frac{2}{3}$ de la dose chirurgicale avaient remarqué une dilatation modérément rapide du col utérin, sans apporter de troubles chez l'enfant ni d'arrêt du travail ni d'excitation chez la mère.

MORTALITE MATERNELLE

Aucune.

CONTRE-INDICATIONS

1. Anesthésiques

Les mêmes que pour le pentothal sodium i.v. Entre autres, troubles prononcés des voies respiratoires, oedème de la glotte, lésion cardiaque décompensée.

2. Obstétricales

Aucune.

(à suivre)

MEMORIAL DU DOCTEUR THEO. COTE

Un groupe d'ancien élèves du regretté Docteur Côté, décédé en juin dernier, veulent perpétuer sa mémoire, en organisant une souscription chez les membres de la profession dentaire du Québec, pour défrayer les frais d'une plaque commémorative et de la fondation d'un prix annuel appelé "*Prix Théo. Côté*".



DOCTEUR THEO. COTE

La figure du Docteur Théophile Côté demeurera toujours vivante chez ceux qui l'ont connu. Durant une vingtaine d'années, des générations d'étudiants ont connu son esprit scientifique désintéressé et son dévouement infatigable à la formation dentaire de ses élèves. Nul professeur, peut-être, parmi tous ceux qui se sont succédés dans les chaires d'enseignement de la Faculté de Chirurgie dentaire de l'Université de Montréal, n'a laissé dans le coeur et l'esprit des dentistes de la génération actuelle, un meilleur souvenir de leurs jours d'Université.

Il fallait voir avec quel plaisir véritable on se pressait autour de lui durant les congrès ou les réunions qui groupaient ses anciens élèves! Et durant les vacances, quand le professeur Côté, au cours d'un voyage, arrêta visiter un de ses élèves, c'était fête dans la région et tous les dentistes des alentours laissaient leur besogne pour venir saluer le Docteur Côté.

Plusieurs d'entre nous ont eu recours, à maintes reprises, à ses conseils et à son expérience; il ne se passait pas une semaine, sans qu'il reçut une lettre d'un de ses anciens élèves pour solliciter un renseignement, pour demander un service. Et c'est toujours avec une gentillesse et une bonhomie, dirons-nous légendaire, que le Docteur Côté indiquait une technique nouvelle, conseillait un traitement approprié.

Pour reconnaître l'influence profonde qu'eut le Docteur Côté sur la formation scientifique de la génération contemporaine des dentistes, le comité du "Mémorial du Docteur Côté" veut faire les choses dignement. Il demande de la part des anciens élèves du Docteur Côté une souscription généreuse. Aucun objectif n'est fixé pour le montant du don; tout est laissé à la générosité du souscripteur.

On ne fera aucune sollicitation directe. Les dentistes sont priés d'envoyer leur chèque aux Membres du Comité, dont les noms apparaissent ci-après:

les Docteurs Viger Plamondon; Amherst Hébert; Conrad Godin; Paul Geoffrion; Ephrem Vinet; Gérard de Montigny.

Nous espérons que les membres de la profession sauront répondre à cet appel pour honorer le nom d'un confrère distingué qui a consacré sa vie à l'enseignement. Soyons fiers, en tant que Canadiens-français, de l'oeuvre d'enseignement accomplie par le Docteur Côté. Restons assurés que nos confrères d'autre langue, auraient fait grandement les choses s'ils avaient voulu perpétuer la mémoire d'un homme de la trempe et de la valeur du Docteur Côté.

pour le Comité,

DOCTEUR GERARD DE MONTIGNY.

Université De Montréal Faculté De Chirurgie Dentaire

COURS DE PERFECTIONNEMENT en ORTHODONTIE

DUREE DU COURS: 2 semaines.

DATE DU COURS: du 4 mars au 18 mars 1946.

FRAIS D'INSCRIPTION: \$100.00.

Ce cours de perfectionnement ne s'adresse qu'aux spécialistes en orthodontie et comprend l'étude de l'un des appareils les plus nouveaux employés dans la pratique courante. Il portera sur l'appareil "Twin-Arch" de Johnson. Le mode d'action ainsi que la fabrication de cet appareil seront étudiés à fond.

L'Université ne fournissant pas le matériel employé pour la fabrication de cet appareil, le candidat devra se procurer dans les magasins dentaires tout ce dont il aura besoin.

PROGRAMME DU COURS COURS DE PERFECTIONNEMENT en PROTHESE COMPLETE

DUREE DU COURS: 9 jours.

DATE DU COURS: du 4 mars au 14 mars 1946.

FRAIS D'INSCRIPTION: \$75.00.

INSCRIPTION LIMITEE A: 10.

Ce cours, à la fois théorique et pratique, portera sur l'empreinte, la confection des modèles, la confection des porte-empreintes, la prise d'empreintes, le coulage des modèles, l'adaptation des plaques-bases et boudins de cire, l'enregistrement au

moyen de l'arc facial, l'occlusion centrique, la propulsion, le choix des dents, le montage des dents, l'essayage, la mise en moufle, et l'ajustement final. Une méthode simplifiée pour le choix et le montage des dents sera également enseignée.

Les articulateurs Snow ou Hanau seront fournis par la Faculté ainsi que tout le matériel employé dans la fabrication des appareils de prothèse. Un patient sera assigné à chaque dentiste qui suivra ce cours.

PROGRAMME DU COURS

COURS DE PERFECTIONNEMENT en TRAITEMENT DE CANAUX

DUREE DU COURS: 5½ jours.

DATE DU COURS: du 11 février au 16 février 1946.

FRAIS D'INSCRIPTION: \$50.00.

INSCRIPTION LIMITEE A: 6.

Ce cours, à la fois théorique et pratique, mettra en valeur les nouvelles méthodes thérapeutiques employées dans les traitements de canaux. Il portera sur l'anatomie physiologique et histologique de la dent, l'étude des changements pathologiques de la pulpe, la réaction des tissus de la dent aux irritations, la bactériologie, la manière de faire des prélèvements, la pulpectomie, le blanchiment des dents, l'obturation des canaux et l'apectomie. Toutes les opérations se feront sur des patients spécialement choisis dans la clinique centrale de la Faculté.

PROGRAMME DU COURS

DATE	HEURE	COURS	SUJETS	CLINICIENS
Lundi, le 11 fév.	9.00		Assemblée générale.	Dr M. Archambault
Lundi, le 11 fév.	10.00		Procédures à suivre à la clinique; Choix des instruments; Stérilisation des instruments	Dr M. Archambault
Lundi, le 11 fév.	1.30	Démonstration	Mise en place de la digue; Technique sur la manière de faire des prélèvements	Dr M. Archambault
Lundi, le 11 fév.	3.00-5.00	Clinique		Dr M. Archambault
Mardi, le 12 fév.	9.00	Théorie	Principes généraux	Dr M. Archambault
Mardi, le 12 fév.	10.30	Clinique	Thérapeutique	Dr M. Archambault
Mardi, le 12 fév.	1.30	Théorie	Apectomie	Dr M. Archambault
Mardi, le 12 fév.	3.00	Théorie	Bactériologie & Stérilisation	Dr A. Frappier
Mardi, le 12 fév.	4.30-6.00	Théorie	Principes de médecine	Dr M. Archambault
Mercredi, le 13 fév.	9.00	Théorie	Technique et interprétation des radiographies	Dr M. Archambault
Mercredi, le 13 fév.	10.30	Clinique	Thérapeutique	Dr M. Archambault
Mercredi, le 13 fév.	1.30-5.00	Clinique	Démonstration	Dr M. Archambault
Judi, le 14 fév.	9.00	Théorie	Obturation de dents à portion apicale béante	Dr M. Archambault
Judi, le 14 fév.	10.30	Théorie	Anatomie, Physiologie & Histologie de la dent	Dr G. Gauthier
Judi, le 14 fév.	1.30	Théorie	Pulpectomie	Dr M. Archambault
Judi, le 14 fév.	3.00	Théorie	Blanchiment des dents	Dr M. Archambault
Judi, le 14 fév.	4.00-5.00	Théorie	Bactériologie & Stérilisation	Dr A. Frappier
Vendredi, le 15 fév.	9.00	Théorie	Etude des changements pathologiques de la pulpe	Dr M. Archambault
Vendredi, le 15 fév.	10.30	Clinique	Réactions des tissus de la dent aux irritations	Dr M. Archambault
Vendredi, le 15 fév.	1.30-5.00	Clinique		Dr M. Archambault
Samedi, le 16 fév.	9.00		Présentation des cas de patients traités	Dr M. Archambault
Samedi, le 16 fév.	10.30		Discussion générale	Dr M. Archambault
Lundi, le 4 mars	9.00-12.00	Théorique	Principes généraux et étude théorique de l'appareil Johnson (Twin-arch)	Dr P. Geoffrion
Lundi, le 4 mars	2.00-4.30	Clinique	Fabrication des bagues d'après la méthode de Johnson	Dr P. Geoffrion
Mardi, le 5 mars	9.00-12.00	Clinique	Ajustement et fabrication de l'appareil Johnson	Dr L. Lépine

DATE	HEURE	COURS	SUJET	CLINICIEN
Mardi, le 5 mars	2.00-4.30	Clinique	Ajustement et fabrication de l'appareil de Johnson	Dr P. Geoffrion Dr O. Hébert
Mercredi, le 6 mars	9.00-12.00	Clinique	Traitement de cas avec l'appareil de Johnson (sur patients)	Dr P. Geoffrion Dr L. Lépine
Mercredi, le 6 mars	2.00-4.30	Clinique	Traitement de cas avec l'appareil de Johnson (sur patients)	Dr P. Geoffrion Dr O. Hébert
Jeudi, le 7 mars	9.00-12.00	Clinique	Traitement de cas avec l'appareil de Johnson (sur patients)	Dr P. Geoffrion Dr L. Lépine
Jeudi, le 7 mars	2.00-4.30	Clinique	Traitement de cas avec l'appareil de Johnson	Dr P. Geoffrion Dr O. Hébert
Vendredi, le 8 mars	9.00-12.00	Clinique	Traitement de cas avec l'appareil de Johnson	Dr P. Geoffrion Dr L. Lépine
Vendredi, le 8 mars	2.00-4.30	Clinique	Traitement de cas avec l'appareil de Johnson	Dr P. Geoffrion Dr O. Hébert
Lundi, le 11 mars	9.00-4.30	Technique	Fabrication sur modèles, des différents appareils employés dans le traitement des malocclusions.	Dr O. Hébert
Mardi, le 12 mars	9.00-4.30	Technique	Fabrication sur modèles, des différents appareils employés dans le traitement des malocclusions.	
Mercredi, le 13 mars	9.00-4.30	Technique	Fabrication sur modèles, des différents appareils employés dans le traitement des malocclusions.	
Jeudi, le 16 mars	9.00-4.30	Technique	Fabrication sur modèles, des différents appareils employés dans le traitement des malocclusions.	
Vendredi, le 17 mars	9.00-4.30	Théorique	Discussion générale.	Dr P. Geoffrion
			Film-technique complète du Twin-arch.	Dr L. Lépine Dr O. Hébert

DATE	HEURE	LOCAL	COURS	SUJET	CLINICIEN
Lundi, le 4 mars	9.00-10.00	Salle de cours	Théorique	Prothèse—Revue générale.	Dr V. A. Dubé
Lundi, le 4 mars	10.15-11.30	Salle de cours	Théorique	Anatomie de la bouche.	Dr J. Delage
Lundi, le 4 mars	2.00-3.00	Salle de cours	Théorique	La prise d'empreinte (stents).	Dr V. A. Dubé
Lundi, le 4 mars	3.15-4.30	Clinique de prothèse	Clinique	La prise d'empreinte (stents).	Dr V. A. Dubé Dr C. A. Durand
Mardi, le 5 mars	9.00-11.00	Laboratoire de prothèse	Laboratoire	Confection des modèles.	Dr G. Lord Dr V. A. Dubé Dr C. A. Durand
Mardi, le 5 mars	11.15-12.00	Salle de cours	Théorique	Etude du modèle.	Dr L. Laporte Dr G. Lord
Mardi, le 5 mars	2.00-3.00	Salle de cours	Théorique	Confection du porte-empreinte.	Dr G. Lord
Mardi, le 5 mars	3.15-4.30	Laboratoire de prothèse	Laboratoire	Confection du porte-empreinte.	Dr A. P. Bélair Dr E. Giguère
Mercredi, le 6 mars	9.00-12.00	Laboratoire de prothèse	Laboratoire	Confection du porte-empreinte.	Dr T. Guimond Dr G. Lord Dr A. P. Bélair Dr C. A. Durand
Mercredi, le 6 mars	2.00-3.00	Laboratoire de prothèse	Laboratoire	Polissage du porte-empreinte.	Dr L. Laporte Dr G. Lord Dr R. Poupart
Mercredi, le 6 mars	3.15-4.30	Salle de cours	Théorique	Prise d'empreinte (finale).	Dr V. A. Dubé Dr G. Lord Dr R. E. Lussier
Jeudi, le 7 mars	9.00-10.00	Clinique de prothèse	Clinique	Prise d'empreinte.	Dr V. A. Dubé Dr A. P. Bélair Dr L. Laporte Dr G. Lord
Jeudi, le 7 mars	10.15-12.00	Laboratoire de prothèse	Laboratoire	Coulée des modèles.	Dr R. E. Lussier Dr V. A. Dubé Dr A. P. Bélair
Jeudi, le 7 mars	2.00-3.30	Laboratoire de prothèse	Laboratoire	Adaptation des plaques-bases et confection des boudins de cire.	Dr L. Laporte Dr G. Lord Dr J. Nadeau
Jeudi, le 7 mars	3.45-4.30	Salle de cours	Théorique	Enregistrement au moyen de l'arc facial, etc.	Dr V. A. Dubé Dr E. Giguère Dr G. Lord Dr J. Nadeau Dr R. E. Lussier

DATE	HEURE	LOCAL	COURS	SUJET	CLINICIEN
Vendredi, le 8 mars	9.00-10.00	Salle de cours	Théorique	L'occlusion centrique	Dr A. P. Bélair
Vendredi, le 8 mars	10.15-11.00	Salle de cours	Théorique	La propulsion	Dr R. Poupart
Vendredi, le 8 mars	11.15-12.00	Salle de cours	Théorique	Indications nécessaires pour la réussite d'un appareil de prothèse "Suggestions" pour dentier complet	Dr L. Laporte
Vendredi, le 8 mars	2.00-4.30	Clinique de prothèse	Clinique	Enregistrement de l'arc facial. Occlusion centrique, etc.	Dr V. A. Dubé Dr A. P. Bélair
Samedi, le 9 mars	9.00-10.00	Salle de cours	Théorique	Du choix des dents	Dr R. E. Lussier Dr J. Nadeau Dr R. Poupart Dr V. A. Dubé
Samedi, le 9 mars	10.15-10.45	Salle de cours	Théorique	Technique du montage des dents	Dr G. Lord
Samedi, le 9 mars	11.00-12.00	Clinique de prothèse	Clinique	Sur le choix des dents (patients)	Dr V. A. Dubé Dr L. Laporte
Lundi, le 11 mars	9.00-10.00	Amphithéâtre	Théorique	Film sur le montage des dents	Dr G. Lord Dr V. A. Dubé Dr L. Laporte
Lundi, le 11 mars	10.15-12.00	Laboratoire de prothèse	Laboratoire	Le montage des dents	Dr V. A. Dubé Dr C. A. Durand Dr L. Laporte Dr R. E. Lussier Dr J. Nadeau Dr V. A. Dubé
Lundi, le 11 mars	2.00-4.30	Laboratoire de prothèse	Laboratoire	Le montage des dents	Dr C. A. Durand
Mardi, le 12 mars	9.00-11.00	Clinique de prothèse	Clinique	L'essayage	Dr R. E. Lussier Dr J. Nadeau Dr V. A. Dubé Dr C. A. Durand Dr L. Laporte Dr R. E. Lussier Dr R. Poupart Dr L. Laporte
Mardi, le 12 mars	11.15	Salle de cours	Théorique	La mise en moufle	Dr V. A. Dubé Dr L. Laporte
Mardi, le 12 mars	2.00-5.00	Laboratoire de prothèse	Laboratoire	Technique de la mise en moufle	Dr V. A. Dubé Dr L. Laporte
Mercredi, le 13 mars	9.00-12.00	Laboratoire de prothèse	Laboratoire	Technique	Dr R. E. Lussier Dr J. Nadeau Dr V. A. Dubé Dr L. Laporte Dr R. E. Lussier Dr J. Nadeau Dr V. A. Dubé Dr L. Laporte
Mercredi, le 13 mars	2.00-3.00	Clinique de prothèse	Clinique	Ajustement des pièces de prothèse	Dr R. E. Lussier Dr J. Nadeau Dr R. E. Lussier
Mercredi, le 13 mars	3.30-4.30	Salle de cours	Théorique	Sur les différentes substances acryliques	Dr R. E. Lussier Dr R. E. Lussier Dr C. A. Durand Dr V. A. Dubé Dr T. Guimond Dr L. Laporte Dr G. Lord Dr R. E. Lussier
Jeudi, le 14 mars	9.00-10.30	Clinique de prothèse	Clinique	Revue des divers cas	Dr R. E. Lussier Groupe des cliniciens
Jeudi, le 14 mars	10.30-12.00	Salle de cours	Théorique	Discussion générale	

IN MEMORIAM

Nous avons le regret d'apprendre le décès des Docteurs Rosario Lamontagne et Georges Roy.

Nous offrons aux familles de ces confrères nos plus sincères condoléances.

WORTH A CLOSER LOOK!



MAY 27TH ~ 30TH

1 9 4 6

**ROYAL YORK HOTEL
TORONTO.
ONTARIO.**



L. V. JANES, O.B.E., D.D.S.

Ottawa, Ontario.

Chief, Division of Dental Health under Department of National Health and Welfare.

Graduated from Chicago College of Dental Surgeons in 1914 and entered private practice in Edmonton, Alta.

Spent four years as dental officer in World War I, serving in Canada, England and France.

Past President of Edmonton Dental Society, Alberta Dental Association and Edmonton Gyro Club.

Joined the Army Sept. 1, 1939, as District Dental Officer, M.D. 13, with rank of Major.

Promoted to Lieut.-Colonel in August 1940 and went overseas as O.C. No. 5 Dental Company in 1941.

Appointed Deputy Director of Dental Services Overseas in August 1942 with rank of Colonel.

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NO. 3

ARE DENTAL CRIPPLES INEVITABLE?*

by ROY G. ELLIS, D.D.S., M.Sc. (Dent).

Professor of Operative Dentistry, Faculty of Dentistry, University of Toronto

I. DEFINITION OF A DENTAL CRIPPLE

(a) *Definitions*: "Dental"—according to a reliable dictionary—means "pertaining to the teeth or to dentistry".

"A cripple"—according to the same source is—"a lame person—one who is partially disabled—one who is deprived of the proper use of a limb".

"A Dental Cripple"—therefore—is one who is partially disabled as it relates to the teeth, or one who is deprived of the proper use of the teeth.

(b) *Examples*: Let me give you some obvious examples with illustrations.

(i) The case of premature loss of permanent teeth without their restoration by artificial means. (Fig. 1).

One author¹ has stated that for the majority of us 'our mouths are 10-20 years older than the rest of the human body'. The illustration (Fig. 1) shown must convey to you this idea. Function, speech formation and aesthetics are interfered with considerably. If this individual's limbs were in relatively the same state of debility as his dental apparatus he would be designated a cripple. Hence, we believe the application of the term "dental cripple" to this individual is justifiable.

But you will say, this is an extreme

case which you have used to illustrate the point. That may be so in terms of your practice, but you have heard it stated many times, that not more than 25%-30% of the population receive adequate dental care such as you render to the patients in your practice. Among the remainder, dental cripples are very numerous.

Consider for a moment the statement of a U.S. writer² when he refers to the men inducted into the U.S. armed forces; "In the recent world conflict when men were first inducted into our armed forces, out of 900,000 selectees, 186,000 were rejected because of dental defects. The requirements were that a man should have 3 upper anterior and 3 lower anterior teeth in contact and 3 upper posterior and 3 lower posterior teeth in contact to pass the dental examination." That is 20.9% or almost $\frac{1}{5}$ were rejected because they were dental cripples. "This group represented the flower of our young manhood of the nation."

(ii) *Dental Cripples—through premature loss and over retention of deciduous teeth.* (Fig. II).

The loss of the deciduous molars at the early age of seven means loss of function, loss of vertical support, (for the bite is now held open by the erupting first molars) and more seriously

*Presented before a combined meeting of the Toronto Academy of Dentistry with the section of Paediatrics, Academy of Medicine, Toronto, as a part of a symposium on Dentistry for Children, Nov. 8, 1945 and also before the Hamilton Academy of Dentistry.
Published concurrently with the Journal of Dentistry for Children.



FIGURE 1
A Dental Cripple (adult)

the deciduous centrals have been over-retained, through failure of normal root resorption. The result of this condition is invariably eruption of the permanent central and laterals too, in *linguo-version*.

(iii) *Dental Cripples*—through *malocclusion and irregularity of teeth*.

It is the considered opinion of many outstanding students of dentistry that probably "50% of all malocclusions and facial deformities arise from simple, minor and environmental causes."³ Premature loss of the deciduous

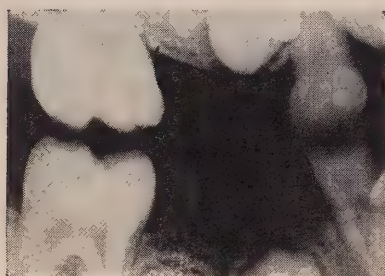


FIGURE 2
Premature Loss of Deciduous Molars at age of 7

a collapsing of the arches through drifting and tipping of the erupting teeth and closure of the space into which the bicuspid are to erupt 2-3 years later. Just what the case will look like when all the developmental forces have ceased to function and all the permanent teeth are in place it is impossible to say; at present the child cannot possibly masticate its food properly, the food therefore cannot possibly be mixed with saliva to initiate the digestion of the carbohydrates because it isn't held in the mouth long enough; furthermore, thinking of the future, the present indications are that this child must be considered a potential dental cripple for the future, through malocclusion.

Over retention of deciduous teeth may have a profound influence in the creation of malocclusion. As an illustration, you may recall cases where

teeth and failure to use space maintenance when necessary are reported by Dr. Don. C. Lyons of Jackson, Mich., to be responsible for 65% of instances of malocclusion. In other words, we can assume that if we could control dental diseases responsible for the premature loss of deciduous teeth we could eliminate the development of a large group of potential dental cripples at the outset.

Some of the factors which interfere with the normal growth and development of the teeth and jaws are minor at the outset and even temporary, but once the complicated process of dental development has been interfered with, recovery is difficult and the very forces of nature which normally are constructive, may become destructive, because the initial minor disturbance having once become established develops into a major factor for malocclu-

sion. It is possible that we let many incipient cases of malocclusion develop unrecognized in our practices.

Premature loss of deciduous teeth is but one factor in the development of malocclusion. "The aetiology and prognosis of many malocclusions is unknown."³ Constitutional disturbances, nutritional deficiencies and inherited characteristics are among the more complicated aetiological factors involved in the development of malocclusion.

An interesting contribution has been made by geneticists relative to heredity as a factor in the cause of malocclusion.⁴ "Hellman has shown, in the case of the permanent dentition, that there is a striking difference in the sequence of eruption between normal occlusion groups and malocclusion groups. For example, children with malocclusion begin to erupt their permanent teeth earlier and finish the process later than do those with normal occlusion. Moreover, the first tooth of the permanent set to erupt in the malocclusion group is on an average the lower central incisor, while in the normal group it is the lower first molar. Besides in the malocclusion group the upper first molar precedes its lower partner."

Doctors Norma Ford and A. D. A. Mason⁴ studied the Dionne Quintuplets tooth eruption pattern and report as follows: "That the first permanent teeth of the quintuplets to erupt were consistently the lower central incisors."

"That the upper first molars preceded the lower first molars."

"The fact that a common pattern in the order of eruption of the teeth can be traced among the Dionne quintuplets suggests that this pattern may be an inherited one."

Finally, "The inherited characteristics were traced back to the deciduous dentition."

Is it not likely that within a few years with the enlargement of the knowledge already gained in this field of heredity it will be possible to predict with some degree of accuracy the

probability of the development of malocclusion, for each child, if the eruption pattern is known, not only of the permanent teeth but of the deciduous teeth.

(iv) *Dental Cripples—through aberrations in the number of teeth which develop.* (Fig. III).

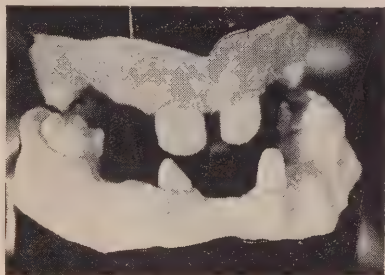


FIGURE 3
Congenital Absence of Teeth

As the result of a disturbance within the early stages of the developmental process of tooth formation this child is missing 24 teeth congenitally. Function, aesthetics and speech formation are grossly interfered with:—the child is a dental cripple without question.

Thus we have considered the four examples of the development of dental cripples namely:

(i) Through premature loss of permanent teeth without their restoration (adult).

(ii) Through premature loss and over-retention of deciduous teeth.

(iii) Through malocclusion and irregularity of teeth.

(iv) Through aberrations in the number of teeth formed.

Thinking now in terms of the child, you might well ask the question;

II. WHAT EVIDENCE IS THERE OF THE DEVELOPMENT OF DENTAL CRIPPLES AMONG PRESENT DAY CHILDREN?

In your practice you see children whose dental development is normal and you strive to maintain the normal, by systematic attention. Let me remind you, however, that the number

of children who receive adequate attention in this way (which includes more than merely filling holes,) is but a small fraction of the total. To answer the question asked, let me cite two surveys.

Recently, 12 children whose ages averaged $9\frac{1}{2}$ years, were selected at random from the membership of the K. Club of Toronto, and were examined in the presence of two prominent members of this Academy. These children were not likely to have been privileged to have received dental service in dental offices, but on the other hand, they were not from the most underprivileged homes in the city of Toronto. They had received some dental treatment through the school dental services. Eleven of these twelve children had gross disturbances (apart from dental caries) in their dental development, which would

place the majority of them in the category of potential dental cripples of the future.

Here is what we would like to see at the age of $7\frac{1}{2}$ (years). (Fig. IV).

Unless something is done soon for the child seen in Fig. V he is a potential cripple in the future through malocclusion.

The second survey I wish to cite is that which was made among the Primary School children in the Porcupine District of Northern Ontario, Canada. This survey was conducted by the Dental Public Health Committee of the O.D.A. in collaboration with the R.C.D.S. Board of Ontario and is reported by Dr. T. R. Marshall in J.C.D.A. May, 1945. I had the privilege of being present in Timmins when this survey was begun and of seeing the mouths of many children who were examined.



FIGURE 4

Healthy Mouth at $7\frac{1}{2}$ years of age

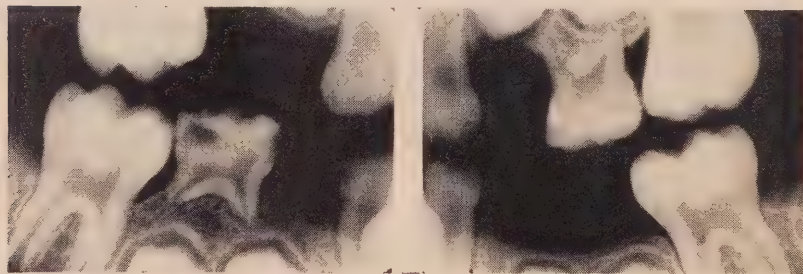


FIGURE 5

Potential Dental Cripple at $7\frac{1}{2}$ years of age

PORCUPINE DISTRICT SURVEY—1945 SPACE MAINTAINERS REQUIRED

- 72 Five Yr. Olds — 144 Space Maintainers.
42% of the Total but they need 130 foundation teeth extracted also.
- 100 Six Yr. Olds — 138 Space Maintainers
61% of the Total but they need 217 foundation teeth extracted also.
- 71 Seven Yr. Olds — 170 Space Maintainers
43% of the Total but they need 261 foundation teeth extracted also.
- 61 Eight Yr. Olds — 140 Space Maintainers
40% of the Total but they need 201 foundation teeth extracted also.

There are potential dental cripples in that district by the hundreds.

Perhaps you will protest, that this is not representative of all large cities or many other areas you could name, and I will hasten to agree with you. It does indicate the responsibilities which we as a dental profession accept as custodians of the dental health of our people. Oliver has aptly stated,³ 'The majority of children with dental diseases if untreated, not only become dental cripples, but worse, have their general health penalized and often seriously impaired.'

We have not yet reached the stage when we can prevent dental diseases, so that our program necessarily becomes one of "protection" against the ravages of dental diseases. In a survey of the Guggenheim Clinic in New York City,⁵ it was revealed that the following conditions existed among new, very young patients.

GUGGENHEIM CLINIC—1941

Age	— 3 — 4 — 5
No. of Patients	—116—212—385
Per cent with Cavities—	60— 75— 80
Aver. No. of Cavities—	2.3— 3.5— 4.2

Therefore, if our program is to be "fully protective", it must commence with the very young child. Furthermore, if our program, is to be successful we, as members of the dental profession, must recognize the importance of not only the environmental influences within the mouth, but also the nutritional, constitutional, and factors of heredity. Many cases require the most sincere cooperation between the dentist and the paediatrician, before treatment is instituted. "The well being of the whole child is the basic consideration."⁶

III. PROGRAM FOR THE FUTURE

If we are to make any progress in our struggle for the elimination of "dental cripples" the program devised must be founded on the development of preventive measures and in the meantime, action of a 'protective type'.

(a) *Protective Dentistry*

As I see it, an active program of "protective dentistry" commences very soon after the birth of the child. While ante-natal care of the mother and child is the responsibility of the physician, the oral health of the mother is important. Every expectant mother should be made dentally fit and recalled for re-examination at 4-6 monthly intervals during the pregnancy and nursing period. The dentist should be included in ante-natal clinics wherever possible.

During the first few months of the child's life active participation of the dentist in the health program for the child, may appear superfluous. However, discussion with the parent on the care of her own teeth and those which the child will soon have, would be of great value. Education, relative to the teeth and oral structures, made a somewhat individual matter in this way and at a time when the mother is most concerned about the welfare of her child, would have a profound effect. Is it not possible that many of the new children and their mothers could be contacted through the city-wide "Well Baby Clinics"?

Again let me refer to the 12 Kiwanis children who were examined. We requested that each child bring his or her toothbrush along and demonstrate how it was used. I wish you could have seen the motley collection which were

presented and how they used them. Oh, we can talk all we like on how to use a toothbrush, but a good practical demonstration would go a lot further. The initiation of this practical instruction should be given to the mother in the "Well Baby Clinic," and then to the preschool child as the time came due.

Let me suggest then five phases in the program I foresee.

- (1) The child pays his first visit to the dentist in the "Well Baby Clinic" or preferably in the dentist's office. At this time the visit is an educational one for the parent. It is devoted to an examination of the mother's oral condition and instruction on the importance of the child's first teeth, and the care of them. Discussion of nutrition, in collaboration with the paediatrician is also covered at this time, both as it relates to the mother and to the child.
- (2) Through the medium of an accurate recall system the child and parent are recalled for re-examination and further education at regular intervals, possibly every six months and more often if it is found necessary.
- (3) The child grows up with regular periodic visits to the dentist, having his teeth cleaned at intervals. In this way his first visit is not one demanded by toothache, which is all too frequent, and often a disastrous initiation to the dental office. To the parent of the child, the regular periodic visit to the dentist is a well established habit by the time the child reaches the age of marked susceptibility and certain fundamental dental education has been given on a very practical individual basis.
- (4) If we recall the table showing the figures from the Guggenheim Clinic, dental caries is a profound reality with the preschool child, long before he reaches the school era and the benefits he might derive from the school dental service. Therefore, in conjunction with

the "Well Baby Clinics," for the older preschool children of parents who cannot afford to seek the services of the family dentist, provision should be made for complete "protective" dental service required by the 3, 4, 5 or 6 year olds. If all parents of these children could be persuaded to go to the family dentist, so much the better. However, wherever the service is given, success for the scheme is based primarily on two factors:

- (a) Getting started early enough.
 - (b) Following a rigid recall system, so that the service is complete.
- (5) The natural extension of this program to the school era should be relatively simple. Success would still be dependent on giving a complete protective dental service (not just one of filling holes and extracting teeth).

Now I can almost hear some of you thinking out loud and saying that the idealistic program outlined is utterly impractical and the dream of a theorist. Maybe you are right, but let me think out loud too, and add my thought that the present scheme we are following, with no dentist attached to the "Well Baby Clinics" and insufficient preschool dental attention for those children who do not find their way into your office and a dental service in the schools which is definitely better than none at all but is not complete and too extensive to make it complete because of the backlog of accumulated work, is far more impractical than the program I have suggested.

The program may have to be limited to certain ages at the outset, but once it is established it could be extended to older children. At all times where possible, the service should be given by the family dentist, but failing that, it should be provided for.

In the present program it would

appear that there is no hope of overtaking the accumulated needs; there is little educational value unless it is being repeated at regular intervals; the service is not complete in all phases, and what is even more disastrous, in many instances it is relied upon by some parents, but because of the backlog of work on hand, long waiting periods elapse before cavities are taken care of and teeth are often hopelessly involved by that time.

If, on the other hand, the program is commenced very early on a "protective basis" in conjunction with the paediatrician (before the backlog of repair work has accumulated to prodigious proportions) and it is extended into the school system on a regular interval and complete service basis, potential dental cripples among children could be reduced in number considerably. Smug satisfaction with the "Status quo" inevitably condemns some children to the status of dental cripples.

The importance of cooperation with the paediatrician in this program cannot be overstated, because I believe that the systemic factors are of the utmost importance in the aetiology of dental diseases. Such seemingly unimportant factors as fatigue, the mental outlook of the child and his way of life are probably closely related to his dental conditions.

"Therefore any measures that promote the health of the child increase the likelihood of the teeth remaining sound." 7

CONCLUSION

If all the difficulties which lie in the way of putting this ideal program into effect were to be dissipated tomorrow, I wonder whether we as dentists would be ready to fulfil our obligations in it. If the answer is "yes" then we are in a better position than I judge we are. If the answer is "yes" and "no", then I respectfully submit that we could not

perform a greater service to humanity, than to initiate and foster a study group on the subject of "Protective Dentistry", which embraces the whole problem that is, both medical and dental in its aspects. If, as the result of our deliberations and constructive planning we became as influential in the prevention of dental cripples as the Ferrier Study Club's of the West have become in the realm of gold foil restorations, the health professions would have reason to be thankful.

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2. J. H. Gonders: Personal Communication: In paper about to be published.
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4. Norma Ford and A. D. A. Mason: "Heredity as an Aetiological Factor in Malocclusion." Journal of Heredity, Washington, D.C. 35: p. 58: Feb. 1943.
5. Annual Report of the Murray and Leonie Guggenheim Dental Clinic, New York City, 1941.
6. W. Hyde: "The Paediatrician and Orthodontist." American College of Dentists Journal: 9-10: 300-308: 1942-3.
7. G. B. Hopkins: A Maternity and Child Welfare Dental Service: British Dental Journal: 79: 1-8: July 6, 1945.
230 College Street.

RESPECTING ADVERTISEMENT IN DECEMBER ISSUE

An advertisement appeared on the inside of the back cover of the Journal of the Canadian Dental Association, Vol. 11, Number 12, December 1945, with the heading "War Surplus Stock at Reduced Prices".

After inquiry, official statement has now been made that this advertisement has no connection with the surplus stock of dental supplies accumulated by the Canadian Dental Corps.

DENTAL HEALTH IN CHILDREN*

by J. H. EBBS, M.D., Toronto, Ontario

Dental caries is one of the most prevalent diseases and therefore it is of some concern to the medical practitioner. The treatment of dental disease is the responsibility of the dentist. The medical practitioner also has a responsibility in endeavouring to prevent dental disease from becoming established. His contact with the child from birth gives him an opportunity to control to some extent some of the factors which are known to or thought to control dental disease.

The first, and probably most important factor is diet—for the various components of diet, good or bad, seem to affect in some way this whole question of dental health. It seems to have an effect both through oral environment and through the effect on the body as a whole in producing resistance to tooth decay.

It would seem that the only approach to an understanding of the whole question of dental health must come through an understanding of the development of the tooth. To understand the development of the tooth we must know the development of the whole body. In order to appreciate the rapid and tremendous changes which take place in the development of the human body just consider the newborn infant—weighing about 7 pounds, doubling its weight in 5 months, and tripling it in 11 months. What would happen if the average adult could double his or her weight in 5 months? Consider how carefully one would have to choose and measure the materials which would have to go into the doubling of our present size if we were to have a healthy body and one which was in proportion. Consider how carefully one would have to guard against ex-

ternal influences on the growth of the body during this rapid growth. Consider how carefully one would have to be guarded against the ravages of disease which might interfere with the orderly growth of the various parts of the body.

Such rapid changes fortunately do not affect adults, but they are present in all infants and similar changes, if not as dramatic, are taking place throughout childhood. Also before the child is born, the first living cell must multiply several hundred times in size before the 7 pound newborn baby is produced.

During the early and critical stage of development, the teeth are also being developed, and though they have not yet appeared, they become subject to the same stresses and strains as the rest of the body. The quality of calcification tends to change as the periods of development change and as extra strains are put upon the psychological development of the body. Before birth, calcification is normally good, due to the buffer action of the mother. Her reserves are drawn upon if necessary to protect the unborn infant. However, not every mother affords good materials for the development of her child. If her body is depleted of essential materials, then her unborn child will suffer. If through the complications of pregnancy, such as vomiting, toxæmia, disease such as syphilis, and so on, the natural growth of the foetus is interfered with, you can expect to find it also in the teeth.

NEONATAL RING

The transverse scar, known as the neonatal ring, found on the tooth, which represents the separation of the prenatal from the postnatal devel-

*An address delivered at a combined meeting of the Academy of Dentistry and the Academy of Medicine—Section of Paediatrics and also before the Hamilton Dental Association as part of a symposium on Dentistry for children in November, 1945.

opment of the tooth, is I think a reflection on the poor control we have over the process of adjusting the newborn infant to its new environment. Starvation, dehydration and withholding necessary foods, such as vitamins D and C, in varying degrees, are probably responsible for some of these scars—which represent arrested growth, not only of the tooth but of the whole body. Successfully breast-fed infants are spared much of this due to the fact that breast milk will contain all essential food elements.

In infancy, the calcification of the forming teeth is often poor, and we as medical practitioners dealing with a large number of both well and sick infants can understand how this can happen. We know that very few serious disturbances which might affect growth ever occur in the breast fed infant. The nutritional disturbances and the severe infections occur in the artificially fed infants. This has been shown time and time again. Vomiting, diarrhoea, fevers and disturbances of the digestion produce many changes in the body which could affect the development of the teeth.

In early childhood, there is good calcification, probably due to slower growth, and less strain on supplies of essential foods.

From 2 or 3 up to 5 or 6 years of age, there is often poor calcification—when disease is more prevalent and when less attention is paid to diet, especially to the regular administration of vitamin D. A large number of mothers neglect or do not give cod liver oil because they think it unnecessary after infancy, and the young child certainly considers it unnecessary at this age.

The orderly life at school and the steady growth of the school years usually produces fairly good calcification. However, the period 10 to 13 years again becomes poor due to faulty nutrition, illness and endocrine disturbances.

The factors in the diet which are of importance in the development of

the tooth appear to play their part from the earliest tooth bud until the tooth is lost in later life.

VITAMINS

Vitamin D, and with it I put vitamin A, is necessary for the development of any bony structure. The utilization of calcium and phosphorus depends upon vitamin D. The formation of those teeth which have started before birth will depend therefore upon the diet of the mother, and it should contain vitamin D.

Calcium and phosphorus intake must be adequate to have the full effect of vitamin D, and they must be properly absorbed and utilized. So often we find patients who have an adequate diet prescribed but who are deprived of its benefits by some condition such as coeliac disease, gastro-enteritis, and so on, which prevents its absorption.

The formation of the tooth and its future survival depend upon vitamin D, calcium and phosphorus. Experimental work has demonstrated their role in the prenatal development of the tooth and in their ability to aid in caries-resistance in the child.

FLUORINE

Fluorine has been prominent in recent years as an agent in the control of dental caries. It would appear to have an effect upon the structure of the tooth, especially the enamel, and may have some influence upon the future resistance of the tooth. Its use in drinking water, in dentifrices and the amount to be used are problems which take on a public health aspect and should get leadership from the dental profession.

DIET

That a good diet, complete in all its nutritional elements, can prevent and also arrest dental caries is now well known. This is the ideal goal to which we should strive in bringing about universal 'preventive' dentistry. The tooth is only part of a living body. The tooth should be considered as a living structure. It must be supplied with an adequate amount of all the essential

foods to be perfect. Perhaps calcium, phosphorus, vitamins D and C and fluorine are most important. But I feel sure that fat, protein, carbohydrate, vitamin B, and so on are also important factors. Whether fat forms a protective layer over the tooth, whether resistance to infection is linked up with protein, whether excess carbohydrate increases bacterial counts and excess acid, whether vitamin B has an influence on the absorption and utilization of other food elements—whether any of them are specific—we do not know but we do know that they are essential for the body as a whole.

Clinical experience would lead one to believe that heredity plays a large part in susceptibility to dental caries. However, it is also found that poor dietary and poor health habits are often inherited and may be the cause of dental caries in these families.

PROBLEMS OF ORTHODONTIA

Problems of orthodontia are too complex to deal with in any detail, but there are some factors which are related to development which should be mentioned. The orthodontist must know as much about the development of the child in its various stages as does the medical practitioner.

The tooth buds are laid down in a known and orderly pattern. Interference of the normal can come from a variety of causes. When we consider the tremendous changes in the proportions of the skull from the infant to the adult, the effect of various stresses is easy to understand. The skull is relatively wide in the infant. The lower face increases rapidly in size during infancy. The growth of the angle of the jaw and the migration of the molars go on at the same time. The growth of the skull in its various parts is definitely related to other parts, such as the brain, the eye-balls and the teeth. The changes taking place in the size and shape of the skull make it subject to pressure and arrested growth from a variety of causes.

Some gross abnormalities of the face and especially the jaw have been produced before birth by the intrauterine position of the foetus. Others are produced at birth by tremendous moulding and trauma in long and difficult labour. Others develop due to faulty position in infancy—as for example the child who sleeps in one position only—developing an irregular flattening of the head, which sometimes brings one side of the face farther forward than the other. The child who sleeps on its face and retards the development of the jaw is another example. Thumb-sucking, obstructed breathing, due to tonsils and adenoids, are also factors of some importance.

There is the group of children who have some degree of thyroid deficiency and a resulting retarded development of the bones of the face and the teeth. Possibly there are other glandular and metabolic factors not as clearly understood.

It seems clear that anything which interferes with the growth of the jaw will interfere with tooth eruption and with orderly formation and will create crowding and irregular alignment.

MEDICAL PRACTITIONER RESPONSIBILITY

What can the medical practitioner do to assist in a better program of preventive dentistry? It should begin by stressing the need for a good prenatal diet, paying particular attention to the food elements which are in increased demand by the developing foetus. They are calcium, phosphorus, vitamin D, vitamin C, iron and protein, which are found in such simple foods as milk, meat, egg, fruit, vegetable and whole grain cereals.

The possible effects of a lack of essential foods during long periods of vomiting or toxæmia of pregnancy should be considered. Perhaps newer methods of feeding will be found when ordinary foods cannot be tolerated.

In infancy an optimum intake of the proper foods should be maintained to ensure optimum growth.

Breast-feeding of infants should be insisted upon whenever it is possible.

Cod liver oil and orange juice should be given to the baby as soon after birth as possible in order that the supply of these essential vitamins will not be broken. They should be continued during the summer as well as winter.

During illness and nutritional disturbances in the growing child the essential foods should be provided as soon as they can be tolerated. When special diets or changes in diet are prescribed everything should be maintained at an optimum level.

The need for cod liver oil during the whole of childhood and adolescence must be continually stressed in order that growth and the development of teeth will be at its best.

A proper diet should repeatedly be prescribed for a child through its years of growth, with instructions about the essential foods being brought to the attention of the mother from time to time.

The mother should be kept interested in the development of the teeth. This is often a good incentive to better health practices.

A check of the dietary routine of the older child should be made especially during early adolescence for excess sweets, and as a reminder that a normal diet is still essential.

The child should be started on proper dental prophylactic care at as early an age as possible.

The teaching of dental health should be carried on in every year of school life.

The physician can help in preventive work by clearing up foci of infection, by removing obstructing and diseased tonsils and adenoids and infections of the oral cavity.

Watch for the earliest signs of deformity. Any signs of abnormal growth in the skull should be corrected as early as possible. Prenatal deformities might be subject to forms of correction as may also some of the severe deformities of trauma and moulding at birth. Pressure changes in the shape of the jaw and the skull due to faulty position should be remedied as early as possible. When flattening of the head is seen in an infant it should be corrected. Thumb-sucking, if causing deformity, should be stopped.

The importance of general good health on the health of the living teeth should be considered at all times. This applies both to the general systemic health and also to the conditions of the oral cavity. Infection of the mouth and gums, teeth that are not properly cleaned, improper foods, such as excess sweets, are all factors which can be pointed out to the patient before too much harm is done.

There should be close cooperation of the dental profession with the physicians in interchanging ideas and becoming acquainted with new developments in the preventive aspects of dental health. The teaching of dental health should be extended to all children, mothers and medical students. Research programs should be started in which the dentist and the physician will cooperate.

DO YOU SUFFER FROM NOVOCAIN DERMATITIS?

The Department of Dental Surgery and Anaesthesia of the Faculty of Dentistry of the University of Toronto is making a survey of those members of the profession in Canada who are suffering from novocain dermatitis. If all those who are so afflicted would communicate with Professor J. H. Johnston, D.D.S., 230 College Street, Toronto, Ontario, stating date of onset, number of years in practice prior to onset and such other information as they would care to provide, it would be greatly appreciated.

TRUE ACRYLIC DUPLICATION OF ANTERIORS FOR IMMEDIATE INSERTION

by DR. AIME COUTURE, Ottawa, Ontario

Great strides are being made in dental corrective and replacement work since the advent of dental plastics; and as these are being perfected they permit aesthetic effects with increased durability. In fact the profes-

sion today is able to offer to the public reproductions of which we may well be proud.

This is due to the incessant endeavours on the part of interested clinicians who unreservedly keep us in-

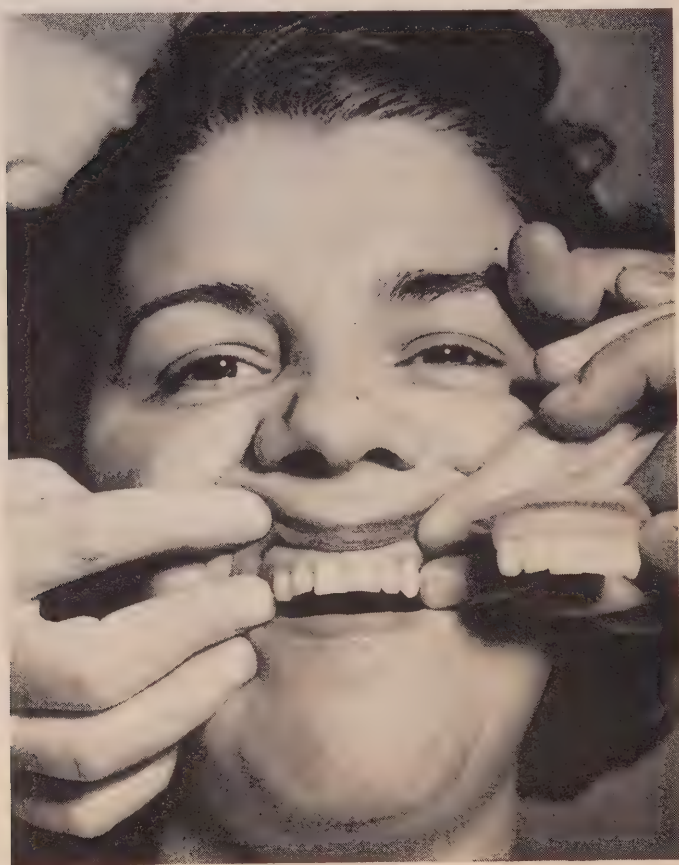


FIGURE 1

formed at every dental association meeting or through articles in our dental journals.

The idea in corrective and replacement work is to reproduce and attain the physiological and biological needs of our patients, and secondly, which to many seems the most important, is surely to satisfy their desire to conceal any evidence of the existence of artificial restorations.

Usually this implies duplicating as closely as possible their original tooth structures, defects or peculiarities on which depends so much their individuality or mental quietude.

This article is intended therefore to furnish my own observations and technique which have been of great help in obtaining these desired results in a sure, rapid and effective way, and which have proved to be the delight of many.

ADVANTAGES

1. Simplicity of technique.
2. Elimination of guess-work.
3. Variations in colour and characteristic blemishes controlled for duplication and aesthetic effect.
4. Breakage of anterior teeth greatly reduced.
5. Psychological effect on the patient.
6. No mould of prefabricated teeth can imitate accurately the existing conditions.
7. One complete set-up (Sectional) of six anteriors.

TECHNIQUE

Fig. 1 shows the patient's teeth "in situ" before extraction and their exact duplication in dental acrylic. Note the reproduction of mesial, labial and incisal characteristics.

Fig 2 shows two impressions in alginate or hydrocolloid materials taken of the upper anterior teeth.

Determine shade of teeth.

Vibrate self separating plaster (Solvite) (1) in one impression; be sure case is free from encumbrances (air bubbles and imperfections. Vibrate stone (Coecal) in the second impression. This cast to be used for reference purposes.

Lubricate solvite cast, invest with stone in the lower half of flask, labial surface of teeth upwards, as shown in Fig. 3. Apply separating medium and vibrate stone to fill second half of flask.

Allow stone of flask to harden, then separate and place lower half in tepid water and bring to a boil. This will with some help on your part, remove all the soluble plaster from the flask leaving the exact impression of the teeth. Be sure that the remaining solvite and colouring matter are carefully removed.

Apply Film-Ac as directed, to the lower half of flask (lingual surface) and correlate the colour in the shade guide with the acrylic shade chart.

Packing Technique: Use any of the



FIGURE 2

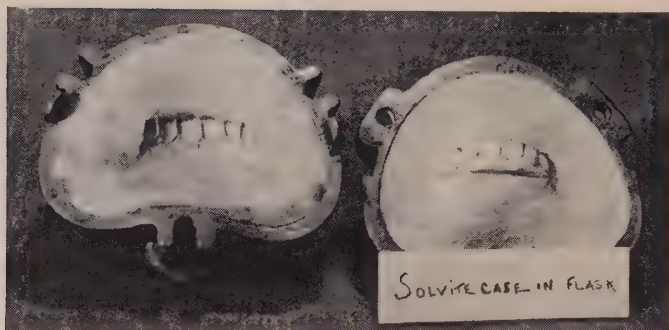


FIGURE 3



FIGURE 4

accepted methods. I prefer the dry-pack technique.

Trial pack using wet cellophane of the acrylic mass, press, open flask. Be sure to moisten cellophane to check colour and to prevent dragging the acrylic. Trim off the excess overpack that interposes between the halves of the flask after the last test pack, then the characteristic blemishes and the fillings should be simulated.

The flask is clamped securely and placed in tepid water bath and cured for two hours at 165 degrees.

When the necessary curing is completed, allow to cool. Trim and polish.

Proceed with taking a muscle-moulded impression using any accepted technique with which you are most

familiar. I prefer the Giffin Hydro-colloid and compound technique.

Mount on articulator in correct centric bite. Set up the posterior teeth on base plate, remove them from the cast and proceed to the removal of the anterior six teeth, using a pencil to indicate the termination of the marginal gingiva and the cervix of the teeth.

Place the acrylic confection "in situ" and wax up. The case is now ready for the dental technician.

Fig. 4 shows the end result.

REFERENCE

Turner and Anthony "American text-book of Prosthetic Dentistry"

ANNOUNCEMENTS

Two Day Post-Graduate Course In Western Provinces

Organization of a two-day post-graduate course in Dentistry for Children, in each of the three western provinces, Manitoba, Saskatchewan, and Alberta, is now in progress. The purpose of these courses is to study intensively clinical application of known measures which dentists can undertake to promote and maintain health in children.

These courses are being organized by the Canadian Dental Hygiene Council, the Canadian Dental Association, and the Provincial Dental Associations of each Province, with the co-operation of the three Provincial Universities, and will be held in Winnipeg April 22-23, Regina 24-25, Saskatoon April 26-27, Edmonton April 29-30, Calgary May 1st-2nd.

A nationally known authority, Dr. Stuart A. MacGregor, head of the Department of Children's Dentistry, University of Toronto, will be the special clinician. The program will be augmented by lecturers from the three provincial universities on subjects related to the course.

Similar short courses have been given during the last eighteen months in the Dental Faculties of the University of Montreal, Dalhousie University, Halifax, McGill University, Montreal, and University of Toronto. Three hundred and fifty-six dentists attended these courses, in the East, that they might receive training in the newer knowledge of dentistry for children.

The financial structure for these courses shows broad co-operative action. Grants are being made by the Canadian Dental Association, the Governments of Manitoba and Saskatchewan through their Departments of Health, the provincial Dental Associations in the three provinces, and the Canadian Dental Hygiene Council.

There will be no tuition fee charged, but there will be a registration fee which includes a dinner meeting on the opening night.

The attendance will be limited, so early enrolment is essential. Further information is available from the Secretary of your provincial Dental Association.

Dentistry has a vast task ahead in taking care of expanding demands for dentistry for children. This is a matter of concern to every dentist who realizes that he needs post-graduate study.

Tentative Program of National Dental Convention, Toronto, May 27-30

MONDAY	TUESDAY	WEDNESDAY	THURSDAY
8.00 A.M.— Dental Public Health Council Breakfast Meeting	9.00 A.M.— Clinics GROUP A	9.00 A.M.— Clinics GROUP C	9.00 A.M.— Clinics GROUP B
8.30 A.M.— Registration	10.30 A.M.—	10.30 A.M.—	10.30 A.M.—
9.30 A.M.— EXHIBITORS' TABLE DEMONSTRATIONS	Clinics GROUP B	Clinics GROUP A	Clinics GROUP C
12.15 P.M.— Luncheon Speakers: C.D.A. President O.D.A. President	Make Your Own Arrangements	12.15 P.M.— Luncheon Speaker "to be announced "	12.15 P.M.— Fellowship Luncheon Ladies Included "Entertainment"
2.15 P.M.— DR. STANLEY BAGNALL "Research on Dental Caries And Its Appli- cation To Practice."	2.00-4.30 P.M.—	2.30 P.M.— Surgeon Commander WALLACE GRAHAM "Focal Infection and Its Relation to Arthritis"	
2.55 P.M.— DR. WM. BOYD "Malignancy With Particular Reference To The Mouth"	INDIVIDUAL	3.10 P.M.— Lt.-Col. STUART GORDON "Plastic Surgery"	
3.35 P.M.— DR. C. H. M. WILLIAMS "Diseases and Conditions Seen In the Mouth"	TABLE		
4.00 P.M.— Canadian Dental Association Meeting	CLINICS		
5.00 P.M.— D.I.L.P.A. Meeting		3.50 P.M.— DR. H. K. BOX "New Aspects of Dental Research"	
6.30 P.M.— Class Reunions	5.00 P.M.—	4.30 P.M.— Ontario Dental Association Meeting	
8.30 P.M.— Exhibitors' Open Night	Hart House Homecoming Reception	7.00 P.M.— Presidents' Reception And Dinner Dance	
	Buffet Supper		
	Entertainment		

GROUP CLINICS

Clinicians divided into three groups.....	A B and C
Tuesday morning.....	GROUPS A AND B
Wednesday morning.....	GROUPS C AND A
Thursday morning.....	GROUPS B AND C

NOTE—Group Clinics listed under general subjects only.
Titles will be announced later

GROUP A—

Dr. Howard Merkeley.....	Winnipeg, Man.....	<i>Full Dentures</i>
Dr. C. H. M. Williams.....	Toronto.....	<i>Periodontia</i>
Dr. John Clay.....	Calgary, Alta.....	<i>Radiography</i>
Dr. R. J. Godfrey.....	Toronto.....	<i>Partial Dentures</i>
Dr. C. D. Husband.....	Red Deer, Alta.....	<i>Anaesthesia</i>
Dr. D. Tanner.....	Toronto.....	<i>Oral Surgery</i>
Dr. W. C. Bushell.....	Montreal, P.Q.....	<i>Porcelain—Acrylics</i>
Dr. Norma Ford Walke.....	Toronto.....	<i>Genetics</i>
Dr. W. Ross & R. Hemmerick.....	Kitchener, Ont.....	<i>Crown and Bridge</i>
Prof. G. H. W. Lucas.....	Toronto.....	<i>Useful Drugs in Dentistry</i>

GROUP B—

Dr. G. D. Stibbs.....	Vancouver, B.C.....	<i>Gold Foil</i>
Dr. W. MacIntosh.....	Toronto.....	<i>Periodontia</i>
Dr. R. E. McMahon.....	Montreal, P.Q.....	<i>Oral Surgery</i>
Dr. I. H. Ante.....	Toronto.....	<i>Full Dentures</i>
Dr. G. H. Chudleigh.....	Halifax, N.S.....	<i>Cavity Preparation</i>
Dr. R. G. Ellis.....	Toronto.....	<i>Dentistry for Children</i>
Dr. M. Archambault.....	Montreal, P.Q.....	<i>Endodontia</i>
Dr. J. F. Giffen.....	London, Ont.....	<i>Partial Dentures</i>
Dr. M. A. Cox.....	Toronto.....	<i>Preventive Dentistry</i>
Mr. C. Wakefield.....	Toronto.....	<i>Sulfa Drugs</i>

GROUP C—

Dr. H. R. McLean.....	Edmonton, Alta.....	<i>Gold Inlays</i>
Dr. W. Linghorne.....	Toronto.....	<i>Periodontia</i>
Dr. George Morgan.....	Toronto.....	<i>Significance of Dental Roentgenological Findings</i>
Dr. F. L. Miller.....	Fredericton, N.B.....	<i>Amalgams</i>
Dr. Harry Ebbs.....	Toronto.....	<i>Nutrition</i>
Dr. J. H. Johnson.....	Toronto.....	<i>Oral Surgery</i>
Dr. A. Couture.....	Ottawa, Ont.....	<i>Immediate Dentures</i>
Dr. S. A. MacGregor.....	Toronto.....	<i>Dentistry for Children</i>
Dr. W. L. Hugill.....	Toronto.....	<i>Silicates</i>
Dr. Wm. Magner.....	Toronto.....	<i>Blood Dyscrasia's</i>
Dr. Louis Fenech.....	Windsor.....	<i>Endodontia</i>

ORTHODONTIC SECTION

TENTATIVE PROGRAM

Tuesday, May 28th, 1946

- 9:00- 9:15—Inauguration of Section,
F. MARTIN, D.D.S., Toronto, Pres. Ontario Dental Association.
- 9:15- 9:30—Chairman's Announcements
S. S. Crouch, D.D.S., Toronto.
- 9:30-10:30—Fundamental Facts for the General Practitioner.
MAURICE L. DONIGAN, D.D.S., Montreal, P.Q.
Lecturer McGill University,
Member of the Staff of the Montreal General Hospital Dental Clinic.
- 10:30-11:30—What Types of Malocclusion May Be Considered Suitable For Treatment by the General Practitioner?
W. W. WOODBURY, D.D.S., Halifax, N.S., Dean Dental Department,
Dalhousie University.
- 2:30- 3:30—Where *Is* and Where *Is Not* Extraction Indicated In Orthodontic Treatment?
G. W. GRIEVE, D.D.S., Toronto.
- 3:30- 4:30—Interceptive Orthodontics
R. R. MCINTYRE, D.D.S., Calgary, Alta.
Professor of Orthodontics,
University of Alberta.
- 4:30- 5:00—Business Session.

Wednesday, May 29, 1946.

Symposium by Members of Staff, Orthodontic Department, Faculty of Dentistry, University of Toronto.

- 9:00- 9:45—The Growth of Face of the Normal Child.
G. V. FISK, D.D.S., Toronto.
- 9:45-10:15—The Etiology of Malocclusion.
C. A. CORRIGAN, D.D.S., Toronto.
- 10:15-10:45—A Systematic Procedure in Orthodontic Examination.
M. R. CULBERT, D.D.S., Toronto.
- 10:45-11:30—Orthodontic Diagnosis and Case Analysis.
H. HALDERSON, D.D.S., Toronto.
- 2:30- 3:00—The Stage For Intervention.
M. R. CULBERT, D.D.S., Toronto.
- 3:00- 3:30—Treatment Objectives.
G. V. FISK, D.D.S., Toronto.
- 3:30- 4:00—Appliance Design,
H. HALDERSON, D.D.S., Toronto.
- 4:00- 5:00—Clinics—Steps in the Treatment of Cases Suitable for the General Practitioner.
DRS. CORRIGAN, CULBERT, HALDERSON and FISK.

ANNOUNCEMENTS

Dominion Dental Council Examination

Dominion Dental Council examinations will be written July 15 to 20, 1946. Class A fees should be in the Secretary's office not later than May 20, and Class D, not later than April 20, 1946. A. J. Brett, Regina, Sask., Sec. Treas.

National Convention of Canadian Dentists, Housing Announcement

The Committee on Housing appreciate the early requests coming in for Hotel accommodation. Acknowledgement of your request will be made as promptly as it is possible.

We are receiving the whole-hearted co-operation of members of the Toronto Dental Academy. So do not be surprised if you receive an invitation from your friend or class-mate in Toronto to be their guests during Convention time.

We assure you that, although housing presents problems, we expect through the hospitality being extended by Toronto dentists, combined with the co-operation of Toronto Hotels, your comfort at Convention time will be looked after.

GLENN T. MITTON, *Chairman Housing Committee*

86 Bloor St. W., Toronto

Dominion Dental Council

This Council will meet on May 25 and 26 at the Royal York Hotel, Toronto, Ontario.

—A. J. BRETT, Sec.-Treas.

CHANGE OF ADDRESS

Notice of change of address should reach the Secretary's office before the first of the month in which the change is to take effect. Please furnish old as well as new address.

Members in the Military Services are requested to notify respecting change of address as quickly as possible so that the *Journal* will be received at new address.

In all cases, the former address should be given.

Address all communications to:

The Secretary,
Canadian Dental Association, 211 Huron Street, Toronto 5.

Dentistry for children is not an elementary phase of our profession. It is fundamentally important in that it offers the greatest field for the practice of preventive measures, often requiring meticulous skill which is demonstrated so favourably when exercised on adult patients. It is scientific to a degree that is unsurpassed in other phases of operative dentistry. Certainly the recent knowledge in the procedures of pulpotomies of the young permanent dentition is one of the outstanding accomplishments in dentistry.

—E. Carl Miller.

The Forum

THUMBS UP

AN ARTICLE appeared in the April, 1945, issue of the *Woman's Home Companion* entitled "Thumbs Up" by Dr. Laurretta Bender. Many letters came to the Editor of the AMERICAN JOURNAL OF ORTHODONTICS AND ORAL SURGERY manifesting amazement at the general trend of the article.

Inspired by these letters, the Editor wrote an orthodontist, Dr. Samuel J. Lewis of Detroit, who has contributed manuscripts on this subject to the JOURNAL on several different occasions in the past: The reply of Dr. Lewis will be of interest to orthodontists everywhere, Dr. Lewis' comments follow:

Dear Doctor Pollock:

In answer to your letter of inquiry dated April 4, 1945, I have just finished reading the article "Thumbs Up" by Dr. Laurretta Bender, in the April issue of the *Woman's Home Companion*.

In my opinion the article contains some truths, some half truths, and some dangerous errors. Where Dr. Bender got her information I do not know, but since she is a child psychiatrist she certainly has access to the best information available on the subject. What she does with it is another story.

When I first made my study of thumb-sucking at the Merrill-Palmer School, in 1924, I, like many of my colleagues, regarded the subject from a purely mechanical and, so to speak, orthodontic point of view. It was evident that thumb-sucking caused teeth to protrude; hence the habit should be broken, regardless of consequences

of a psychological nature. Since that time, some of us have sought the advice and counsel of workers in other fields—preschool educators, pediatricians, psychiatrists, and clinical psychologists. Pooling our knowledge and interests, and at the same time adopting an open-minded attitude, we found a common ground upon which to proceed.

There was no question in our minds but that in certain types of cases thumb-sucking caused a protrusion of the upper incisors and at times a retraction of the lower incisors. However, we found that in most cases, when the habit was broken the coincidental malocclusion disappeared normally, even as late as the twelfth year. In most cases the child drops the habit by the fourth year.

Thumb-sucking is a normal behaviour pattern in babies brought up under *modern civilized conditions*. The habit is almost nonexistent in primitive children who are fed when hungry and are not allowed to cry and who are moreover often allowed to suckle until they are 3 years old. Lack of sufficient sucking movements seems to be the most satisfactory explanation of the habit in the great majority of cases. Four-hour feeders suck their thumbs more often than three-hour feeders, and those on no particular schedule suck their thumbs less than the three-hour feeders. Many pediatricians of my acquaintance have adopted what they call the "*hunger schedule*," that is, they advise the mother to feed the child

whenever it evinces hunger by crying, and they report that these babies seldom suck their thumbs. Hence, the advice of Dr. Bender—to encourage thumb-sucking and to help the baby who has trouble in getting his thumb into his mouth—seems to me to be a bit of foolish and unscientific procedure. Better to inquire into the feeding habits of these babies, in my opinion.

We find that, in most children who grow and develop normally and adjust themselves socially, the thumb-sucking habit is dropped by the fourth year. This was true of the Dionne quintuplets, all of whom sucked their thumbs as babies. Four of them dropped the habit when they were about three years old. Emily continued, and the dentist recommended a deterrent appliance. However, the psychiatrist reasoned that since the others had broken themselves of the habit Emily should be given another six months or so of grade, and within this period she too dropped the habit without the assistance of deterrent treatment.

If the habit persists after the sixth year it is no longer to be regarded as accessory to the taking of nourishment but rather as the retention of an infantile pattern. It then becomes a problem, not only for the orthodontist but for the psychiatrist as well.

In my own practice I do not pay much attention to thumb-sucking in babies except to look into their feeding habits and consult with the pediatrician when necessary. The cause of most malocclusions lies much deeper than a local habit, and in my opinion orthodontists lay too much stress on this normal behaviour pattern. I never advise mechanical appliances to check the habit, for they do not get at the cause. Moreover, it has been my experience and that of others as well that the child who is prevented from sucking his thumb often takes to masturbation and other undesirable habits. Thus the substitution may lead to consequences far worse than the habit itself.

(Signed) SAMUEL J. LEWIS.

EXPERIMENTAL CHRONIC FLUORINE INTOXICATION: EFFECT ON BONES AND TEETH

by WILLIAM H. BAUER, M.D., D.D.S., St. Louis, Mo.

Summary of paper in Am. Jour. of Orthodontics and Oral Surg., Dec. 1945.

CHRONIC fluorine intoxication of puppies produced extensive systemic changes of the bones and developing teeth. The intensity depended upon the age of the animal, the dose, and the duration of the administration of sodium fluoride. In puppies fed exclusively the milk of the fluorine-poisoned mother, changes of the bones were observed prior to those of the tooth buds.

The fact that in experimental fluorosis the changes of bones and developing teeth could not be prevented nor alleviated by an antirachitic diet, and calcification of a startling amount of periosteal and endosteal bone occurred in spite of continued administration of fluorine suggests the idea

that the pathogenesis of the bone and tooth lesions in rickets and fluorosis differs.

Of course, the enzymatic and protoplasmic action of fluorine produced rickets-like changes in the bones and the dentine of puppies, but its effect on the bones of the older dogs and the enamel in general differed from rickets.

These experimental studies and recent observations of dental fluorosis in children and adults associated with bone changes indicate the necessity of a thorough roentgenographic examination of the skeleton of children showing "mottled enamel" in fluorine areas in this country.

THE PRESENT STATUS OF DENTAL FOCAL INFECTION TO ARTHRITIS

Discussion of paper by Fred Wertheimer, D.D.S., from Jour. Mich. S. Dental Soc., Nov. 1945.

Twenty-five years ago the medical and dental professions were supporting the theory of focal infection to such an extent that the removal of suspected foci was recommended as a means to cure almost any ailment. This stand is somewhat comparable to the present day use of the sulpha drugs for many conditions in which there is no evidence that they are of any benefit.

The condition most frequently attributed to focal infection probably is arthritis (especially the rheumatoid type) which according to a recent editorial is so prevalent and resistant to treatment that "everyone from the humblest housewife to the most erudite physician has some special cure for it." Teeth were considered the most prolific source of potential infection, probably because they are the most readily accessible and most easily removed parts of the body.

Thousands of serviceable teeth have been sacrificed probably in every community, and tooth extraction to cure arthritis is all too prevalent in many places yet today. Even when the sacrificed teeth are infected, few arthritic patients receive any lasting benefit

from their removal. The miraculous cures that were reported earlier may be attributed to the few patients who were helped that stand out in memory while the many others are forgotten. Rheumatoid arthritis, also, is a condition characterized by periods of inactivity or latency and if teeth should be removed just prior to a period of inactivity, the extractions may be accredited mistakenly with a cure.

Definite infection in the mouth should be eliminated as a general health measure as there are other systemic diseases which may be associated with such infection. Teeth, however, often do not have to be extracted in order to eliminate infection.

Only definitely infected teeth can have any relationship to systemic conditions; therefore a careful diagnosis should be made of each tooth. If infection is not shown by a bacteriologic culture from the tooth, the tooth should not be sacrificed.

It seems appropriate to mention, here, that early and systematic care of the teeth will prevent most infection and save much expense and discomfort.

PRAYER IN DENTISTRY

Prayer is a good thing. We ought to use it more. It is acknowledgment of the super-human, the Divine and all of His handiwork.

There is a final answer to all of our questions, which cannot be found this side of the Divine. Why does tissue heal? Why and how do chemicals act? Why and how does the body chemistry go on from day to day? We should be thankful for the light we have, that we are able to do what we do. We should

have a thankful hope in virtually all we do. And this is suggested by Dr. Walter J. Pryor of Cleveland, recently, in the fine art of denture construction when he suggests that after we have done all we can do, we should offer up a little prayer to the effect that all may be well. You ask him if it works. This is not a doubtful aspersion, just a hopeful suggestion—*Jour. California State D. Assoc.*

Violent exercise is like a cold bath. You think it does you good because you feel better when you stop it.—Robert Quillan.

THE TREATMENT OF VINCENT'S INFECTION WITH PENICILLIN

by GEORGE CHRISTENSEN, D.D.S., B.D.Sc., L.D.S., R.C.D.S., R.F.P. & S.,
H.D.D., R.C.S., F.A.D.S.M., Squadron Leader, Royal Australian Air Force.

Condensed from Australian Jour. of Dentistry, Nov. 1945.

MANY methods of application of penicillin have been suggested:—

1. Intra-muscular injection;
2. Saline solutions topically;
3. Aerosol solutions topically;
4. Lanette wax ointments;
5. Pastille and lozenge method;
6. Dry powder insufflation;
7. Penicillin packs;
8. Penicillin-barrier cream mixture.

A water soluble cream which can be applied without trauma and which remains in intimate contact with the affected area for a considerable time, is by far the method of choice so far evolved for the application of this drug to ulcerated areas in the mouth.

Investigators in other fields found that a commercial preparation known as "Barrier Cream", which is a water soluble cholesterol cream with physical properties resembling a vanishing and cold cream, formed an excellent medium as a vehicle for the penicillin and did not in any way inhibit the action of the drug.

This material was procured and a mixture of penicillin and Barrier Cream was tried.

The results with this mixture were dramatic, and there was a marked improvement in 24 hours, and in every case the acute symptoms had subsided in two days.

From previous experiences, it was thought that if some substance could be added to this mixture to keep it in contact with the area for a longer period of time the results would be even better.

Mixtures of "Barrier Cream" and various gums, such as gum trag., gum acacia, pulv. trag. co., etc., were made and clinical tests carried out to determine the length of time that the mixture would remain in the mouth in contact with the gingival tissues. Barrier Cream and gum trag. appeared to be the most efficient.

It is felt that the Barrier Cream-gum-trag.-penicillin mixture gave greater rapidity of healing, and furthermore, this mixture, due to its adhesive properties, can be applied to ulcerated surfaces on the tongue, tonsils, cheek, lips.

The mixture, which consists of—

Penicillin, 100,000 units;
Barrier Cream, 120 grs.;
Gum Trag., 6-8 grs.,

can be made up and stored in an airtight container in the refrigerator indefinitely.

Generally speaking, this amount is sufficient for one case, and the mixture is divided approximately into 10 equal parts so that each application contains about 10,000 units.

The amount of gum trag. can be varied according to local conditions present. This mixture is applied twice hourly, and may be given to the patient to apply himself.

The method of application is first to carefully spray the mouth, removing loose debris, etc., and then gently dry the area without traumatizing the tissues.

The cream is applied liberally over the ulcerated area from the buccal aspect with a small spatula and the lip or cheek drawn over to force the cream through the interproximal spaces. Some more cream is then smeared over the lingual gingival margin; this forms a covering dressing, which will remain in place for up to 1½ hours. In most cases, smears taken six hours after treatment will show a marked diminution in the number of organisms, and after 12 hours treatment often appear negative.

In addition to its bacteriostatic effect, penicillin appears to have definite properties of epithelial stimulation, for apart from the disappearance of ulcerated areas, the growth of epithelium over these areas in all

cases appears to be much faster than normally.

It is felt that in penicillin a drug has been discovered which must ultimately become the routine treatment for acute Vincent's infection as its results so far exceed those obtainable by any other known method. It cannot be too emphatically stated, however, that the treatment is aimed only at the treatment of the "acute" phase of the disease, and after this is controlled the primary incubation zones must be elim-

inated to prevent recurrence of the infection. In this respect, it is felt that reports such as "there has been no recurrence", and the like, which indicate that the penicillin treatment was the only therapeutic procedure employed, must be read with the reservation that the treatment of Vincent's infection consists of more than the treatment of the acute phase, and it is in the treatment of this acute phase that penicillin has its important application.

IN OUR OPINION

Reported from Greater N.Y. Dental Meeting in Jour. of 2nd Dist. D. Soc.

THE "In Our Opinion" Board ruled on the following points:

Relines of full dentures are just a makeshift. The impression should be obtained under biting strain and the restoration remade.

Acrylic occlusal restorations on teeth are failures because they wear down and close the bite.

Twelve to 18 patients a day depending on how much help is available is the number of patients an average dentist can see in one day.

General anaesthesia is preferable to local for diabetic patients who should be sugar free with multiple extractions discouraged.

Acrylics can be satisfactorily processed without foiling.

Don't use acrylic for compound inlays.

Biting of the cheek where full dentures are present is caused by the upper molars coming out too far. Cross bite of molars on that side is the solution.

Acrylic jackets are still in the experimental stage. Porcelain is still the choice.

A satisfactory centric relation can be obtained without a Gothic registration.

Lingual roots forced into the antrum

should be recovered at the same sitting only when the Schneiderian membrane has been pierced.

Fractured roots may be permitted to remain where they are in dangerous proximity to the mandibular canal or the sinus.

Eventually all teeth used on full dentures will be acrylic ones, with porcelain disappearing.

The only use for acrylics in operative dentistry is where they are reinforced.

A fee is not quoted on an hourly basis or per filling but rather on the nature of the work. Estimates should always be given in advance on extensive dental work.

The cost of running a practice is 35 to 42 per cent of gross receipts. This includes everything.

Believe this or not, that uppers are more difficult to construct than lowers.

The use of cusplless teeth causes forward mandibular movement in edentulous patients.

Calcium gluconate three times a day, a week before extraction, is suggested for bleeders.

The full denture expert takes all edentulous impressions under biting strain.—I. J. K.



Editor: M. H. GARVIN, Winnipeg

Assistant Editor: T. R. MARSHALL, Toronto

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SASKATCHEWAN:

L. D. Haselton, Saskatoon

BRITISH COLUMBIA:

H. M. Cline, Vancouver

Editorial

C. D. A. MEMORIAL FUND

The pressing problem of the moment is the War Memorial Fund which the Canadian Dental Association is instituting to honour the memory of those members of our profession who lost their lives in the service of their country in the Great Wars.

Our Memorial Fund Committee is working hard throughout Canada. On February first, Dr. J. W. Dobson of Halifax, reporting for Nova Scotia, stated that he had received 1 subscription for \$50.00, 3 for \$25.00, 4 for \$10.00, and 5 for \$5.00. With such a splendid start Nova Scotia will run far beyond its objective. Dr. A. E. Chegwin of Moose Jaw, reporting for Saskatchewan, stated that on February first his province had reached its objective with only ten per cent of returns in up to that date. At the annual meeting of Manitoba dentists it was decided unanimously to authorize the Dental Board to pay Manitoba's quota into the Fund thus avoiding any expense for collection. Dr. S. J. Phillips of Oshawa, Ontario, has the largest undertaking of any of our committee members as nearly half of the dentists of Canada reside in his territory. Early in February, Dr. Phillips sent in the splendid report that over \$1,000.00 had been received to date. At the time of writing, over \$1,500.00 have been received by our C.D.A. Secretary, being made up of 1 subscription of \$100.00; 3 of \$50.00; 20 of \$25.00; 2 of \$15.00; 48 of \$10.00; 49 of \$5.00; 1 of \$3.00; 10 of \$2.00 and 1 of \$1.00.

These reports are most encouraging. We are sure that this is a matter which every dentist in Canada will be anxious to support, so if you have not done so please send in your donation, be it large or small, just as soon as possible, to your provincial representative.

In due time you will receive an official receipt from our C.D.A. Secretary, Dr. Gullett, which can be used as a deduction in figuring out your income tax statement.

—M. H. G.

DR. THIBAudeau RETIRES

After many years of faithful service as Editor of the French Section of this Journal, Doctor Alcide Thibaudeau has retired. Much progress has been made during his period of service and Doctor Thibaudeau has made a real contribution to that progress.

There has always been the best of understanding between the English and French editors and we would express our appreciation of this splendid cooperation, so free from any unpleasant controversy.

As Dr. Thibaudeau's activities take him into other fields we wish for him every possible success and happiness for many years to come.

—M.H.G.

CORRESPONDENCE

January 25, 1946.

Canadian Broadcasting Corporation,

TORONTO 5, Ontario.

Dear Sirs:

Last evening at 8 o'clock from Toronto, you put on a program on the Johnny Holme's show, which to say the least, was deplorable.

Dentistry as a profession has its weak points and we can stand a certain amount of ridicule but when that ridicule has a tendency to jeopardize the health of the nation, then some action should be taken.

For years, many of us have given of our time and money to educate the public to the importance of dental care if good health is to be assured, especially for little children. The chief reason why many people still shun the

dentist is because of fear, which is a mistake, because modern dentistry can accomplish miracles with little or no pain. This we are trying to get across to the public. Then you people come along and in one short broadcast shatter many of the results of years of hard work in the public interest.

We would express the hope that this was done from lack of knowledge rather than a desire to affect the public health simply for the sake of producing a questionable laugh from the listening audience.

We would also express the hope that in future we may count on some cooperation from the C.B.C. in our endeavour to produce a healthier Canadian citizen.

(Signed) M. H. GARVIN

BOOK REVIEW

Acrylic Resins in Dentistry, by John Osborne, L.D.S., Wholtime Lecturer and Demonstrator in Dental Prosthetics, University of Sheffield; Honorary Dental Surgeon, Royal Sheffield Infirmary and Hospital. Published by Blackwell Scientific Publications Ltd., 48 Broad Street, Oxford, Eng-

land. Second Edition. 144 pages. Illustrated. Price 12/6 net.

Although the first edition was published just a year ago the popularity of this work has already required a second edition. This has enabled the author to extend the subject matter by adding additional chapters. The use of

acrylic resins in dentistry has come much to the fore in recent years and every prosthodontist is aware of, and thankful for, the great advance in the application of this material. The serious restriction in the use of vulcanite occasioned by the war speeded the increase in use of acrylic resins by the dentists of England.

The author gives a brief history of plastics in dentistry and describes the composition, manufacture, and properties of acrylic resins. With this background, he proceeds to discuss thoroughly the manipulation of the material, describing his tried methods of making models, waxing and flasking. He then describes mixing, applying separating media, packing, curing, deflasking, filing and polishing. A useful chapter is devoted to repairs and the old problem of avoiding cracked teeth.

In this new edition, chapters are included on acrylic teeth, all acrylic immediate dentures and acrylic inlays, crowns and bridges. The author has kept abreast of developments in this work and is to be congratulated on the excellence of his effort.

KENNETH M. JOHNSON

1945 Year Book of Dentistry. Year Book Publishers, Inc., 304 S. Dearborn St., Chicago. 4. Pp. 703. Price \$3.00.

Some twenty questions are placed upon the dust cover of the Year Book of Dentistry. If you can answer them all perhaps you do not need the Year Book. However, purchase of the book upon such a test would result quite probably in one hundred per cent sale to the members of the dental profession.

The balance in subject matter appeals to this reviewer. The selections are well made, and carefully edited and selected from professional publications on a world-wide basis. Notation of the articles taken from the publications with which one is familiar will undoubtedly indicate that only the best has been selected. The book is divided in five parts; each part being under the editorship of an outstanding man in his particular field. Good judgment has been shown in the relative im-

portance of subjects so that the result is a balanced compendium for the year.

No dentist has time to attempt to cover even a part of the professional literature and that very thing is done for him here. The Year Book provides the means by which the dentist can keep abreast of the times. D. G.

Essentials of Local Anaesthesia in

Dentistry by Arthur Cornford Bowden, H.D.D. (Edin.), L.D.S. (Eng.) Senior Dental Surgeon, Birmingham General Dispensary. 60 Pages. Published by The Macmillans, St. Martin's House, Toronto, Ontario. Price \$1.75.

This is a small but very practical book written for dental students of all ages and presents in a clear, concise manner, the fundamental facts in the use of local anaesthetics.

The following subjects are discussed; "Choice of Anaesthetic", "Instruments and Sterilization", "Drugs and Solutions", "Anatomy", "Technique", and "Complications".

The author favours novocaine, adrenalin, preparations quoting Tainter and Thronson in the Journal of the A.D.A., August 1941, to show that the patient is more apt to faint when novocaine is used. From the clinical standpoint this has not been the experience of this reviewer over a long period of time.

In the case of intra-osseous anaesthesia, the author states that occasionally a case will present itself where no other method will produce satisfactory anaesthesia but that it is not worthy of routine use. This reviewer is convinced that this form of anaesthesia has a very definite place in routine practice and that the technique should be mastered by every dentist.

Dr. Edward Samson, President-elect of the British Dental Association, in his splendid introduction to this book points out and rightly so, that it is now the rule to render conservative dental treatment under local or regional anaesthesia and that when he had read this book, he felt that he had learned not a few new things and improved his acquaintance with many he had forgotten. No doubt this would be the experience of most dentists as they peruse this fine book. M. H. G.

Alginate impressions may be used for partial dentures if casts are poured within 13 minutes after the impress is taken. Never invert the impression after the cast is poured as there is distortion of the model due to stress.

—Harold Horton in J. 2nd. Dist. D. Soc.

CANADIAN DENTAL ASSOCIATION NEWS

(FROM THE OFFICE OF THE SECRETARY)

Dr. E. T. Bourke, Quebec Editor

Official notification has been received from the College of Dental Surgeons of the Prov. of Quebec that Dr. E. T. Bourke has been appointed Associate Editor of the Journal of the C.D.A. to succeed Dr. E. M. Laurin.

Dr. G. de Montigny, Editor of French Section

Official notification has been received from the College of Dental Surgeons of the Prov. of Quebec that Dr. G. de Montigny has been appointed Editor of the French Section of the Journal of the C.D.A. succeeding Dr. Alcide Thibaudeau to be effective March 1, 1946.

Dr. H. J. Merkeley Manitoba Representative

The Secretary of The Manitoba Dental Assoc. has notified this office that Dr. H. J. Merkeley has been appointed Official Representative for that province to the Board of Governors replacing Dr. M. H. Garvin. Dr. J. F. Morrison has been appointed alternate.

Labour Exit Permits

In respect to Retired Dental Officers the requirements for Labour Exit Permits has been relaxed. At the request of the Department the following recommendation was made:

"This Association recommends that favourable consideration should be given to any application for a Labour Exit Permit for a dentist who has served in the Canadian Armed Forces and who has been honourably discharged and that in these cases permits be automatically granted by the Unemployment Insurance Commission without further reference, unless desired, to the Canadian Dental Association."

Report of the Rehabilitation Committee

The problem of securing suitable office accommodation is still one of the major problems confronting the Retired Dental Officer.

Through our association with the Canadian Medical Procurement and Assignment Board as well as through the members of our own

Committee, various officials of the Dominion Government were repeatedly advised respecting the seriousness of this situation. Recently, announcements were made of modifications of regulations, some of which may be applicable to professional men.

On December 1 the Controller of Construction announced the removal of restrictions upon building materials.

On December 1 the Rentals Administrator announced amendments to the commercial rental order of the Wartime Prices & Trade Board.

The following is a letter referring to this matter.

December 8, 1945.

The Canadian Medical Procurement & Assignment Board.

Dear Sir,

re: Making available Commercial Accommodation for members of the medical and dental professions who are discharged members of the forces.

The governing councils of the medical and dental associations urge that this Board enact legislation which would make available commercial space for their members who are now discharged from the forces. The request stems from the fact that there is an acute shortage of space for rental.

At the moment, by and large, all commercial space is either (a) owner occupied or (b) tenant occupied.

To accommodate discharged doctors and dentists the legislation would either be in terms that would compel an owner to vacate and rent the space to the veteran doctor or dentist or that would compel an owner to terminate the lease of the present tenant and when the space is vacant be required to select from all the competing prospects for the space, a discharged doctor or dentist.

With respect to (a), it is my opinion that this Board has no power to expropriate owner occupied commercial space. I think it may be true that the government under the Expropriation Act could expropriate the space and then rent it to a doctor or a dentist.

As to (b) any legislation that would compel a landlord to terminate an existing tenant's

lease and rent the space to a member of a particular class would not be enforceable, nor would legislation that would compel a landlord to rent vacant space to a member of such class. If the landlord refused to terminate the lease or if the tenant refused to vacate no effective action could be taken against the landlord. The landlord may be perfectly satisfied with his present tenant. Apart from this consideration, if the space were vacant, amongst the competing prospects one might be a substantial tenant who would be willing to take a long term lease, say 24 years, at a rental, after rent control, far in excess of that which any member of the preferred class could possibly contract to pay. I do not think it would be in any wise appropriate that this Board should attempt to control the landlord's bargaining rights with respect to say the year 1969.

By an expansion of the Rentals Administrator's discretionary powers to exempt commercial leases from eviction control, effective December 1, 1945 this Board has gone as far as it can possibly go, at the moment, to aid returning servicemen in regaining their former space. The Rental Administrator or any of his deputies will receive, hear and consider applications for the exemption of the present tenant's lease from Part II, *inter alia*, in the following cases:

1. If suitable alternative accommodation is available for the tenant.
2. If the landlord or his son or daughter formerly conducted a business in the accommodation which business, by reason of the war, ceased to be carried on therein, and the accommodation was subsequently let to another and if the landlord or his son or daughter desires to re-establish the former business in the accommodation;
3. If the landlord, prior to February 1, 1945, obliged himself to give possession to another tenant at some future date, and the tenant, at the time of making the present lease, had been so informed.

(Signed) R. E. B. BROCKLESBY,
Deputy Rentals Administrator.

*Statement by Major H. A. Proctor,
Exec. Sec. C.M.P.A.B.*

Professional Office Accommodation

During the past few months we have received a large number of communications

from our D.A.C.'s, from various representative groups and from individual doctors acquainting us with the acute shortage of suitable accommodation for doctors' and dentists' offices.

Every avenue of approach has been explored here in Ottawa with a view to obtaining preferential treatment in the release of accommodation suitable for professional offices. Our experience is that there does not exist any central body with authority to control commercial accommodation in the various provinces. Dominion Government officials appear to be well aware of the situation and are sympathetic to the problem but, without new legislation being enacted, they are powerless to improve conditions. It is felt that any proposed legislation attempting to interfere with the right of a landlord to have freedom of choice between prospective tenants would be fought most vigorously and be almost impossible to enforce.

The Executive of this Board have been, and still are, actively pushing for preferential treatment of doctors and dentists, but at this time it would appear that the problem must be attacked by local groups of professional men working together to influence the landlords of their own communities. Professional men, if banded together, can exert very considerable pressure and as the matter of office accommodation may become acute to a majority of practitioners sooner or later, it is a problem for the whole professional group rather than for those individuals who may be in distress at any one time. Concerted action by fully representative professional groups acting locally would appear to be the most effective method of attack.

Rehabilitation Project

The matter of office space is of first concern. Retired Dental Officers are experiencing great difficulty in securing suitable accommodation all across Canada. Through the activity of local dental societies much has been accomplished to alleviate the situation. As an example, the Chairman of the Rehabilitation Committee of the Toronto Academy of Dentistry, Dr. G. V. Morton, was requested to submit a statement respecting the recent activities of his committee. A condensed statement is as follows:

A regular meeting of the Rehabilitation Committee of the Academy was then called

with the object of trying to secure the building together with a loan of the equipment installed in it as a temporary measure.

The Toronto Dental Dealers' Association was asked for financial backing for the scheme as it was felt that the Academy had not sufficient funds for the purpose.

The Dealers' Association agreed to give financial backing to the scheme and drew up a document assuming all financial responsibility and covering the Academy against any financial loss. They also very generously agreed to give up any profits, these to be divided pro rata among the tenants participating.

The plan was essentially that the Academy lease the premises for a period of eighteen months (The Toronto Bible College, the owners, require the building for their own use after July 1st, 1947) and to sub-let the available offices to retiring Dental and Medical Officers.

Upon investigation it was found that approximately \$25,000.00 would be required to carry out the scheme.

The Department of National Defence suggested that the owners might be induced to accept a cash settlement in lieu of rehabilitation. This was agreed to by the owners. The Department of National Defence also agreed to leave in such electric and plumbing fixtures as would be useful.

A lease was taken on premises by the Toronto Academy of Dentistry from February 1, 1946, to July 1, 1947.

A janitor was obtained, and telephone service is to be installed individually to each office with a connection to the receptionist's desk for convenience of messages during absence. Plumbers and carpenters are at work making slight alterations.

Fifteen returned Dental Officers have been signed to occupy the building. The laboratory and x-ray laboratory are rented.

There is room for eight or ten more dentists."

New Motor Vehicles

All practising physicians and dentists and those recently demobilized from the Forces will receive highest priority for the purchase of new vehicles when such are necessary.

Modification of Codeine Prescriptions

"The Department of National Health and Welfare has announced a welcome amendment of the Codeine Regulations effective at the beginning of 1946. Dentists are now relieved from the necessity of providing prescriptions for preparations containing one-eighth of a grain or less of codeine per tablet or other solid form, or liquid preparations containing one-third of a grain or less of codeine per fluid ounce, when such preparations are combined with other medicinal ingredients and the maximum dose prescribed contains these ingredients in the amounts laid down by the circular issued to all dentists and druggists.

The Regulation regarding the sale and use of Codeine as established by Orders in Council remain unchanged in other respects."

Report of C.D.A. Executive Meeting

The C.D.A. Executive met in Toronto at Association Headquarters on February 4-5, 1946.

The Chairman of the Joint Convention Committee presented a detailed report respecting arrangements for the 1946 Convention which was highly commended.

Dr. L. V. Janes, Chief of the Division on Dental Health, Department of National Health and Welfare, met the Executive in order to discuss the proposed arrangements being made by the division represented by him.

A proposal for Group Life Insurance was presented to the Executive, as well as many other matters.

The agenda included a dinner party at the Granite Club given by President Dr. Harvey Reid when members of the convention program committee met the Canadian Dental Association officials. Dr. P. G. Anderson, chairman of the committee, described the progress already made and indicated problems and prospects of the national meeting. The report was very satisfactory.

The Board of Governors meeting of the Canadian Dental Association is set for May 22 at the King Edward Hotel, Toronto. The council on Dental Education meets immediately before on May 20 and 21 at the same hotel.

Dentist For Eastern Arctic Voyage

On each annual voyage of the R. M. S. "Nascopie," The Hudson's Bay Company sends a dentist to attend to the needs of the white people at the various posts in the Eastern Arctic. The trip begins early in July and is completed at the end of September. As an alternative the trip may be divided into one month and two month sections by two men.

All equipment is supplied and all travelling expenses are paid by the Company. An honorarium is provided of \$500. plus fees collected for services which might bring total earnings as high as \$1,000 to \$1,500. This voyage constitutes a rare and enjoyable experience.

Applicants must be fully qualified and registered with one of the provincial boards.

Apply to Mr. R. H. Chesshire, Hudson's Bay Company, Hudson's Bay House, Winnipeg, Manitoba.

Convention Committee Report

The Joint Convention Committee has worked assiduously during recent weeks and will be in a position to announce the program in the near future. Watch the Journal for announcements.

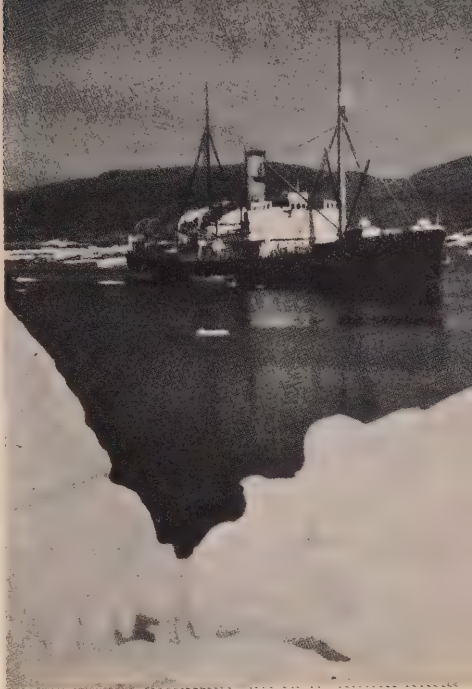
Dental Alumni Home Coming Night at Hart House

The chief entertainment feature of the National Convention of Canadian Dentists will be Home Coming Night at Hart House on Tuesday evening, May 28th. It will take the place of the Sunday evening Reception which, on account of Hotel restrictions, could not be arranged this year.

Dr. J. A. Bothwell and a Committee of the Dental Alumni are in charge of the program and the Warden of Hart House has assured Dr. Bothwell that all the facilities of the House will be at our disposal, the Gym, the Swimming Pool, and the Theatre as well as the Great Hall and Quadrangle.

It is planned to have entertainment in the Theatre and display of fancy swimming in the pool. Buffet supper will be served.

It is expected that the Chancellor, Dr. Cody, and the President, Dr. Sydney Smith, will be on hand to welcome the guests. All those at the Convention and their ladies are cordially invited to this Social Evening. It will be a



THE "NASCOPIE"

splendid opportunity to revisit the University and to meet old friends. When the program is more complete further details will appear in future issues of the Journal.

2T6 Class Reunion

To be held at the King Edward Hotel, Monday, May 27, at 6.30 p.m. Make your plans to attend early and if you cannot make hotel reservation, some member of your class will see you are looked after.

A. J. VINCE, *president*
Toronto, Ont. Pape and Danforth Ave.,

1T6 Reunion

All graduates of 1 T 6 Class and those who had been members of that class at any time are asked to attend a reunion banquet at the King Edward Hotel on Monday evening, May 27, to celebrate the thirtieth anniversary of their graduation.

H. R. CONWAY,
Chairman of Reunion Committee.
421 St. Clements Ave., Toronto, Ontario.

Reunion of Class 1916, R.C.D.S.

All graduates of the R.C.D.S. 1916 class are asked to attend a reunion at the Royal York Hotel, Toronto, on Monday, May 27, to celebrate the thirtieth anniversary of their graduation.

E. G. BERRY

Attention! 3T6 Class Reunion

Commemorating the ten year period after graduation, a class reunion dinner and get-together will be held on the evening of Monday, May 27, at the King Edward Hotel. This

is the first night of the Canadian Dental Association and Ontario Dental Association Convention. Don't let us down boys.

S. H. SHUMACKER

Class 2T1 Reunion

Arrangements are now complete for dinner at the King Edward Hotel, Toronto, for the evening of May 27 at 6 P.M. Do not miss this quarter century get-together on the occasion of our National Convention of Canadian Dentists. See you there.

ROY KERR

NEWS FROM THE PROVINCES

QUEBEC**U. of M. Honoured Dean of McGill**

The University of Montreal, at the request of the Faculty of Dental Surgery, has conferred upon Doctor Arthur Lambert Walsh the degree of "Doctor in Dental Surgery" (Honoris Causa), on February 26, at the Cercle Universitaire.

On this occasion, the teaching staffs of the two dental faculties of the Universities of the City of Montreal and members of the dental profession gathered for dinner.

Doctor A. L. Walsh has been honoured by the University of Montreal on account of his achievements in the dental teaching field as Doctor Walsh has been Dean of the Dental Faculty at McGill since 1927.

Doctor Walsh also rendered eminent service to the dental profession as President of the Canadian Dental Association and the American Association of Dental Schools. Doctor Walsh has collaborated on many occasions with the members of the Dental Faculty of the University of Montreal on dental teaching purposes.

This dinner was tendered by the two dental faculties of Montreal and the dental profession at large. This joint gathering of the graduates of McGill University and of the University of Montreal has been an illustration of the good understanding and of the spirit of collaboration existing between the dentists of the Province of Quebec.

The guests of honour were: Monseigneur Joseph Charbonneau, Chancellor; Monseigneur Oliver Maurault, Rector of the University of Montreal; Doctor Cyril James, Principal of McGill University; Mr. Morris Wilson, Chancellor of McGill University; Honorable Alphonse Raymond, President of the Board of Administration of the University of Montreal; Doctor D. P. Mowry, Chairman of the Board of Governors of the College of Dental Surgeons, of the Province of Quebec; and Doctor Ernest Charron, Dean of the Faculty of Dental Surgery of the University of Montreal.

NEW BRUNSWICK**Saint John Dental Nurses' and Assistants' Association**

This Association completed its organization February 1, being affiliated with the national body and being the first organization of its kind east of Montreal.

The following officers were elected: President, Miss Eileen McDonald; Vice-President, Miss Shirley Fox; Secretary, Miss Freda Fullerton; Treasurer, Mrs. George Steadman; Program Convener, Miss Evelyn Boles; Social Convener, Miss Hyla Huggard.

The Association was created with the assistance of Mrs. Marion Edwards, Toronto, National President of the Canadian Dental Nurses' and Assistants' Association.

At this meeting, Miss Fox gave a paper on "The Assistants' Service to the Dentists".

NOVA SCOTIA

Halifax Dental Society

The regular monthly dinner meeting of this Society was held at the Nova Scotian Hotel on Feb. 7.

The speaker was Lieut.-Col. T. M. Sieniewicz, M.D. who has recently been released from the Medical Corps after a distinguished career overseas. He paid tribute to the efficiency of the Dental Corps "particularly in emergency jaw cases in various theatres of war" which came under his observation.

Dr. Sieniewicz made a plea for more comprehensive and detailed routine examination of the oral cavity by our profession. He mentioned and briefly described various lesions occurring in the mouth, symptomatic of systemic disturbance and which, if observed, and attention directed to such lesions in the early stages, would be of inestimable value to our patients.

The appreciation of the society was expressed in the vote of thanks.

At a previous meeting the presentation of a gavel was made on behalf of the C.D.C. with a few appropriate remarks by Major W. M. Sinclair.

Lieut. D. C. Eaton and Lieut. L. S. Goldberg have recently been released from active service and have opened offices in Halifax.

W. C. O.

Besom and Stane

A curling match of especial interest to the members of the dental profession of the Province of Nova Scotia took place in Halifax, last month, when two rinks met in the final game for the British Consols Trophy. This trophy represents the championship of the province and entitles the holders to represent the province in the MacDonald-Brier playdown at Saskatoon.

Dr. W. H. Young of Kentville was skip of his quartette while Dr. George K. Macintosh skipped the rink representing the Halifax Curling Club. Prior to the final match these rinks had met twice during the three day playdowns. Halifax won the initial game, Kentville took the second and an extra end was necessary to decide the winner in the final match of the bonspiel, the game going to Halifax broomsters 13-12.

BRITISH COLUMBIA

Victoria Dental Society

The January meeting of this Society was held in the Empress Hotel following dinner. There was an unusually large attendance including members of the Dental Corps and those who have returned from Service. Lt.-Col. Dick McDougall, Major J. C. Foote and Major Alec Gunning were warmly welcomed back to the Society.

Drs. Usher, Loudon, Salter, and Hamilton, all of whom have seen service in the Canadian Dental Corps, were unanimously elected to membership in the Society.

A silent tribute was paid to the late Lt.-Col. W. J. Gibson and Dr. E. W. Hetherington who both played such a prominent part in Victoria Dental Society affairs.

The guest speaker for the evening was Dr. W. D. McLeod of Vancouver, B.C. whose subject was,—"Pre and Post-Operative Considerations in Oral Surgery". His talk was practical and helpful as evidenced by the notes being made by many present. He covered the use of the sulphadiazine drugs, penicillin, and the barbiturates, and stressed careful operating and tissue conservation. The talk was followed by an excellent colour film on Oral Surgery which illustrated many of the points made in his address.

Dr. McLeod then presented a table clinic showing the complete instrumentarium for a difficult full mouth exodontia case. This was a great help to those who wished to check up on proper forceps, elevators, suture material and miscellaneous aids.

Vancouver and District Dental Society

The regular monthly meeting of this Society was held in Hotel Vancouver, on February 5.

Dr. Chambers, the president in introducing the speaker of the evening, Professor Chant, explained that it was the policy of the executive to have a member of the University of B.C. staff speak to the Society at one of its meetings.

Professor Chant, of the Department of Philosophy & Psychology spoke on "Practical Psychology as applied to Dentistry". This topic and its application to dentistry is being studied more widely and is being applied more in everyday dental practice than ever before.

Dr. Snider the secretary reporting for the

Diagnosis Study Club told of the general activities of the Club and of a very successful Clinic that was presented at the combined Washington State Dental Association and the Seattle and District Dental Society meeting. "Radiodontic Technique" was the subject covered, the club was represented by Dr. Stibbs, Dr. Ingledew and Dr. Cline.

Dr. F. O. Lind, a graduate of North Pacific College of Oregon was voted into membership in the Society.

ALBERTA

Calgary Dental Society

On January 14 this Society met in the Paliser Hotel, forty men being present, including a good many from the Dental Corps.

Dr. W. G. Neilson gave a very interesting paper on "Periodontia". The interest of the men present, in the subject, was indicated by the discussion which followed the reading of the paper.

Plans are already under way in Calgary for the Western Canada Convention which is to be held in 1947, and which, we hope, can be held in Banff. Committee organization is now under way and will be announced as soon as possible.

In the University News Letter sent to us by Dr. Scott Hamilton, Dean of the Faculty of Dentistry at the University of Alberta, Edmonton, the following items will be of interest to the men of the dental profession generally; "On January 8, the Honourable Mr. Justice Frank Ford, Chancellor of the University, presided over a Convocation ceremony at which seven dental graduates received the degree of Doctor of Dental Surgery.

As at January 15, 1946, the total registration in Pre-Dentistry by ex-servicemen now totals 42."

Edmonton Dental Society

The annual Ladies' Night of this Society was held in the Macdonald Hotel on February 9.

There were 52 couples present including the following guests: Dr. G. M. Little, Edmonton Academy of Medicine, who brought greetings from his Society; Dr. and Mrs. S. Adams, Ponoka; Dr. and Mrs. C. Duke, and Dr. and Mrs. W. Dunbar from Camrose; Dr. O.

Hauck from Wainwright; Dr. R. R. McIntyre from Calgary, plus the following members of the C.D.C., Capt. Cotter, Blaqueire, Fee, Holmes and Yaremchuk.

Dr. W. R. B. Wilson in his able manner proposed the "Toast to the Ladies", which was well responded to by Mrs. Nelson Haynes.

Mr. Egon Grapentin accompanied by Miss Mary Drumond pleased the audience with several well received violin solos.

Mr. F. Herman's display of magic was also well received by the audience.

Mrs. Bartley's orchestra provided music for the dinner and for dancing which followed the dinner, at which we were joined by the dental assistants and their friends.

SASKATCHEWAN

Regina Dental Society

This Society had as its guest speaker, Major Harvey Robb, who gave the members an insight into the operation of the Canadian Dental Corps overseas. He related many interesting and amusing personal experiences.

A welcome was extended to Capt. W. F. Hancock, of Fort Qu'Appelle; and Capt. Jim McLean recently returned from overseas; also, a welcome was extended Major R. S. Rose, recently appointed the District Supervisor at Dental Headquarters, D.V.A., Regina. Major Rose served with the C.D.C.-32 Company M. D. 12, and is well acquainted with the work and the dentists of the district.

Childrens' Dentistry

The Saskatoon Dental Society has accepted the responsibility of acting as host to a convention on Children's Dentistry, April 26, 27, sponsored by the Canadian Dental Hygiene Council and the Canadian Dental Association. Dr. Harry Thompson appeared under the auspices of the two above mentioned organizations, who outlined the projected series of conventions. Dr. L. J. D. Faskin, Secretary of the Saskatchewan Council presented a report upon the work of that body during the past year.

Welcomed back into general practice were Dr. Hallett, Dr. Singer and Dr. Dickson, the latter taking over the office of the late Dr. Milton E. Webb. Dr. Singer, guest speaker, related his experiences in the Dental Corps

since he enlisted in 1940. He served in many places in Canada, England, Normandy, Belgium, Germany and spent V. E. Day in Paris.

MANITOBA

The First of its Kind in Canada

The Department of Health and Public Welfare in Manitoba proudly announced on January 14, 1946, the opening of its school for practical nurses. This is the first class of students in Canada to be offered a course in practical nursing, conducted by a department of the government, leading to licensure upon completion, and with tuition free.

At the present time, there are five hospitals participating in the central school plan; namely, St. Joseph's and Concordia in Winnipeg; Bethesda Hospital, Steinbach; Free Mason's Hospital, Morden; and Selkirk General Hospital making the total enrollment at the central school twenty-one. Courses offered by two other institutions have been approved by the Department of Health and Public Welfare namely, St. Boniface Sanatorium and St. Anthony's Hospital, The Pas.

Enquiries regarding these courses have been received in large numbers from Nova Scotia to British Columbia and even down to California, although as yet they have been given very little publicity.

Of the twenty-one students in the central school all are Manitoba girls with one exception and she is from Saskatchewan. Two are English war brides now making their homes in Manitoba. Six of the girls are ex-service personnel representing all the services.

The course is one year in length including one month of holidays. The first three months are spent in the classroom and the last eight on hospital wards. An examination in theory will be given at the end of the three month period and a practical examination at the end of the clinical experience.

If the graduate from this course is under twenty-one years of age, she will be given an interim permit to practise in institutions only. A permanent licence will be given her when she is twenty-one years of age.

The licensed practical nurse receives a licence card and a pin together with her diploma. FRANCES H. WAUGH, B.A., R.N.

ONTARIO

Academy of Dentistry, Toronto. Second General Meeting, Jan. 16

Speaker: DR. MARNARD K. HINE.

Dean, School of Dentistry, University of Indiana.

Subject: CORRELATION OF AETIOLOGY.

(TREATMENT OF PERIODONTAL DISEASES)

The paper was profusely illustrated with a series of excellent Kodachrome slides depicting the various phases and types of periodontal diseases, including those of rare occurrence, as well as those commonly encountered. Many slides were exhibited which showed the results of proper treatment, and the benefit to be derived from training the patient in efficient and adequate home care.

Dr. Hine did not go into the technique of treatment of periodontal diseases in detail. His main theme was to determine the cause of the disturbance, and base the treatment on this diagnosis, eliminating the cause if possible. If a diagnosis is made and treatment inaugurated, but improvement is not being noted, do not look around for another treatment or try another drug. Go back and review the case from the beginning. It is most likely the cause has not been determined.

Dr. Hine reminded us that we must always be on the watch for systemic factors such as syphilis, diabetes, blood dyscrasias, which are causative or contributory factors in periodontal diseases, this particularly so if our radiograms reveal extensive bone loss over a short period, or in young patients. Such cases should be referred to the physician for physical examination, urinalysis, blood chemistry, etc.

H. J. SHEPPARD, Sec.

Hamilton Dental Society

At the January 16 meeting of this Association the members were divided for clinics in the afternoon by Major MacIntosh and Major Linghorne on the subject of Periodontia, during which the making of periodontal pockets was demonstrated with patients. At the evening session Lt.-Col. Lee Kilburn, recently appointed head of the local D.V.A. branch, explained the function of his office. Dr. Earl Jackson introduced Major Linghorne, the speaker of the evening, who outlined a course

of treatment for Periodontitis, clearly illustrated by coloured slides. Dr. Gordon Spinks thanked the speaker for his splendid presentation of this very important subject.

Dr. Irvin H. Ante was the guest clinician of this society for the meeting on February 13. The afternoon session dealt with "Physiologic Impressions of the Edentulous Arches." Following the dinner, Dr. G. M. Philp presented Dr. Ante to the general meeting and his evening subject was "Complete Denture Prosthesis." Both the afternoon and evening sessions were illustrated by many beautiful Kodachrome slides which clearly portrayed each step in this denture technique. At the conclusion of the meeting Dr. H. A. Robertson moved a hearty vote of thanks to Dr. Ante for his interesting and instructive presentation.

H. J. TOLTON, *Sec'y.*

Niagara Peninsula Dental Association

A meeting of this Association was held January 31 at the Welland House, St. Catharines.

Dr. P. G. Anderson of Toronto was clinician and his subject was "Direct and Indirect Inlays" accompanied by coloured lantern slides. All agreed that the clinic was excellent and Dr. Anderson gave much practical help to every general practitioner in attendance. Forty-eight dentists were at the meeting and came from all over the Niagara Peninsula District which is the area roughly as follows: all of the Peninsula east of a line drawn from Grimsby to Dunnville to Port Colborne.

Drs. Bishop, Feasby, McKenzie and Smeaton were introduced to the meeting and welcomed into the community after serving in the Canadian Dental Corps. Dr. Bert Field, member of the Board of the Royal College of Dental Surgeons, spoke briefly, and Dr. Lee Kilburn, the D.V.A. representative for District "L," Hamilton, gave an enlightening outline of the situation regarding Dentistry for Veterans of this District. The new set up was regarded by all as being much more satisfactory to all concerned than was the case formerly. Membership in our Society was given for one year to all dentists who had returned from the Corps.

J. E. WRIGHT

Toronto Study Club of Dental Technicians

The members of the Toronto Study Club of Dental Technicians were guests of the Toronto East End Dental Society at their January meeting, and had the pleasure of listening to a very interesting talk on Dental Ceramics by our good friend Dr. H. Mercer.

The members of our group are always happy to embrace such an opportunity and to gain any information which will assist us to maintain and improve our standard of service to the profession and the public.

It may be of interest to the readers of the Journal to know that the membership of our Study Club is drawn from not only Toronto but from various cities, from Ottawa to London and the Niagara Peninsula, and is a very wide awake group of technicians.

At the regular January meeting, the club had the pleasure of having as its guest speaker Dr. R. J. Godfrey, of the Faculty of Dentistry, University of Toronto. His address consisted of a very comprehensive survey of the field of partial denture construction, the principles of retention and their practical application. With the aid of slides, drawings, and models, Dr. Godfrey covered the subject very thoroughly to the very great benefit of all our members who were present.

On February 8 members of the Study Club were entertained at dinner with representatives of the Toronto Dental Supply Dealers at the King Edward Hotel, by Mr. Don Laurie, of the L. D. Caulk Company. Dr. Godfrey was also a guest at this delightful function. The members of the Dental Profession are well aware of the fact that the Technicians have, in recent months, been having considerable difficulty in successfully processing partial dentures on models made from the alginate impression materials, and as a result of this difficulty we have made very strenuous objections to the use of such materials.

Mr. Laurie upon learning of this situation immediately arranged to have Mr. J. Butler of the L. D. Caulk Company research staff, appear before us in an effort to assist locating the difficulty. Mr. Butler by a practical demonstration proved conclusively that the trouble is in the faulty manipulation of this material, and laid down a few basic rules for its use. These rules are soon to be issued and distributed to

the members of the Dental profession by the L. D. Caulk Company.

Appreciation of the club members is tendered to Mr. Laurie and his Company, and to Mr. Butler for the very fine clinic and address. After three hours with the clinician members were very loathe to leave. He is a mine of information and is to be highly commended for a very successful evening.

W. S. ALLEN

Ottawa Dental Society

Secretary-Treasurer, Dr. E. S. McCartney advises that there has been three regular meetings of the Society as of January 26. Dr. Harold E. Armstrong is the president for 1945-46 term. Dr. Charles Williams of Toronto was guest speaker on November 26 presenting as his subject "Gingival Recession, Causes, and Treatment". A record attendance of 82 members were on hand to hear Dr. Williams. The address was illustrated with fine coloured slides and the evening was very profitable to all who attended.

Dr. Irving Ante of Toronto was guest of the Society on December 12. He presented an afternoon clinic and continued in the evening. The subject was "Impressions and Complete Denture Procedure". Those who have heard Dr. Ante and seen his pictures know something of the versatility of this presentation.

Dr. Spence Clappison was guest of January 19. Everyone knows of the fine presentation this speaker gives. His subject was "Crown and Bridge Prosthesis". Dr. Alvin Cameron expressed the admiration of Ottawa dentists for the essayist's work.

With other meetings of excellent calibre still to come, Ottawa Dental Society is having a good year.

Dr. Frank Britton Honoured

Dr. Frank Britton of Brantford who has completed 50 years of dental practice, and is continuing in practice was honoured by his colleagues in the Brant County Dental Society at a banquet held at the Brantford Club.

Dr. Britton was presented with a handsome book entitled "Birds of America" on the fly leaf of which was a testimonial signed by all members of the Society.



DR. HAROLD E. ARMSTRONG
President Ottawa Dental Society

Ontario Dental Nurses' & Assistants' Association

At the meeting of the Board of Governors at Windsor on January 26-27, many plans were made for the Ontario Dental Nurses' and Assistants' Convention which will be held at the Royal York Hotel on May 27-30. During these four days, the Convention Committee, under the convenership of Mrs. Tomye Turner, hopes to provide a program which will appeal to everyone. As last year, the fee of \$4.50 will include the banquet and luncheon, and, of course, admittance to the clinics, displays, and all sessions of our Association. This Convention promises to be equally as successful as those of former years. You have enjoyed conventions in the past, so remember the dates and plan to attend this, our fifteenth anniversary.

Brantford Affiliated Association

Mr. Victor Stanton, of Paris, gave an informal talk on "Salesmanship in the Dental Office" at the January meeting of this Association. Miss Alma Baker presided. The hostess, Mrs. Rheva Hemsworth, served refreshments after an enjoyable singsong.

Hamilton Affiliated Association

This Association met at the Scottish Rite on January 16 with Mrs. Mura Dunn presiding.

Kitchener Affiliated Association

At the Iroquois Hotel, in Galt, Reverend Findlay Stewart addressed the members of this Association. After the dinner, a short business meeting was held when plans for the remaining months were made.

London Affiliated Association

This Association had a get-together at Wong's Cafe on January 16th. Miss Daisy Walker presided at the business meeting.

Ottawa Affiliated Association

Miss Addie Campderros, Vice-President of the Association, presided at a meeting held in the Y.W.C.A. in November. Mr. Les Akeson, Manager of the Ottawa branch of the Denco Co. of Canada, gave a most interesting and helpful talk on "Alloy". On January 23, the Ottawa members held a business meeting and decided to hold a rummage sale early in the spring.

Toronto Affiliated Association

Dean Hurst, of the Ontario College of Pharmacy, was the speaker at the January meeting of this Association. It was their annual "Doctors Night" and, as usual, was a most enjoyable evening.

Windsor Affiliated Association

The members of this Association were privileged to have Dr. T. Robinson, President of the Windsor Dental Association as their guest speaker. He chose the "General Duties of the Dental Assistant" as his topic, and it was most inspiring. At this time, plans were made to have a Christmas party at the home of Mrs. Louise Goulin.

In January, eighteen members heard Miss Bessie Mole describe the Mid-Winter in Toronto. A short business meeting was held and it was decided to sponsor a semi-formal dance in May. The members accepted an invitation to have dinner with the Board of Governors on January 26.

RUTH JANKE

*University of Toronto***Dental Alumni Dinner**

Speaker: Dr. Sydney Smith
Pres. of U. of T.

Yellow Room—King Edward Hotel

Promptly at 6:15 p.m., April 8th

Dress: Informal Tickets: \$2.50

Contact Dr. J. A. Bothwell if you plan to attend.

EMPIRE NEWS**Dental Teaching and Research in Great Britain**

It is reported in The Times, London, that dental teaching and research in Great Britain will be aided by grants from the Nuffield Foundation. One of the general aims of the trustees is to support research which promises to help people to be healthier. After promoting schemes for the advancement of child health and industrial health, they have, with Lord Nuffield's approval, turned their attention to dental health, an urgent question in view of the widespread incidence of dental disease.

On expert advice the assistance provided by the foundation is to be in three parts: First,

grants amounting to 9,000 pounds a year for 10 years to four university dental schools to enable them to develop in various ways their research work on preventive dentistry; second, the provision of Nuffield Dental Fellowships designed to improve the supply of dental research workers and teachers; third, a few scholarships to enable dental students of outstanding ability to receive a more thorough scientific training.

The Nuffield Dental Fellowships will be open to three groups of candidates—those with dental qualifications, university graduates in medicine, and thirdly, those holding a university science degree. Fellowship holders will be required to obtain such scientific or other training as may be necessary to qualify

themselves to undertake teaching and fundamental research on dental health and disease.

Normally the annual value of a fellowship will be between 400 and 800 pounds. It may be awarded for one or more years, but as a rule for not longer than three years. Travelling expenses will be paid to fellows who go abroad for study.

The scholarships available for dental stu-

dents are intended for candidates who, in the opinion of their dental school, would profit by receiving during their course of training additional instruction in anatomy and physiology. A scholarship will normally be tenable for only one year, but in suitable cases may be renewed for a second year. It will provide tuition fees and a subsistence allowance not exceeding 200 pounds a year.—SCIENCE.

GENERAL NEWS

Status of Fluoride Therapy in Dentistry

Frances Krasnow Ph. D., of the Guggenheim Dental Clinic, New York, states in the *Journal of Dental Research*, October, 1945, that fundamentally the fluoride ion is extremely active. There are possibilities of danger both in administration as well as in accumulative effects on body tissues notwithstanding recent evaluation to the contrary on the basis of height, weight, fracture studies or urine examinations. Also, fluoride administration cannot be considered a truly preventive measure. Greater ultimate benefit may be reaped from the energy and funds appropriated if cognizance were taken of the physiological needs that are stressed for early childhood and then forgotten. Data shows that this deviation is rapid and may be the cause of the rapid rise in malfunction, both dental and general, as we proceed from childhood through adolescence to adulthood.

Second Dentist-Boy Banquet Held in Cincinnati

The Cincinnati Dental Society has held its Second Annual Dentist-Boy Banquet for the purpose of interesting promising young men in the study of dentistry. The following speakers took part: Dr. Maynard K. Hine, Dean of Indiana School of Dentistry; Dr. Victor Stef-fel, Ohio State Dental College; Dr. Raymond E. Myers, Dean of Louisville School of Dentistry; Dr. William W. Hurst, President-elect, Ohio State Dental Society; Dr. Paul Wells, President of Ohio State Dental Board; and Dr. Harold Hillenbrand, Editor of the *Journal of the American Dental Association*. Several dental movies were also shown, as well as entertainment during the dinner hour.

Vitamin A Consumption Should be Increased

Increasing the family's vitamin A consumption is good for young and old, it appears from studies of rats reported by Dr. H. C. Sherman and Dr. H. L. Campbell, of Columbia University, to the National Academy of Sciences.

Liberal intakes of this vitamin, found in such foods as butter, liver, egg yolk, carrots and green leafy vegetables, tends to postpone aging and increase length of life, Dr. Sherman and colleagues have previously reported.

Now they find that the offspring in rat families on the liberal vitamin A intake grow somewhat more rapidly and with less individual variability. This indicates, the scientists point out, that liberal vitamin A has both a favourable and a stabilizing influence on growth.

This favourable, stabilizing effect on rat growth was observed with vitamin A intakes two and four times higher than the intake considered fully enough to meet the rat's nutritional needs—*Science News Letter*, July 28, 1945, per D. Items of Interest.

Topical Application of Potassium Fluoride in Caries Prevention

Bion R. East, Daniel E. Ziskin, Lewis R. Stowe, Maxwell Kaushan, Ellen P. Richardson (Guest), School of Dental and Oral Surgery, Columbia University, New York, in *Journal of Dental Research*, October, 1945, submit a preliminary report on the caries incidence in the newly erupted teeth of children subjected to repeated topical applications of potassium fluoride, using careful controls, and concluded that the topical application of fluoride offered no protection from dental caries.



MRS MARION EDWARDS, R.N.
Toronto, Ontario

*President of the Canadian Dental Nurses
and Assistants' Association*

Canadian Dental Nurses' and Assistants' Association

Here is good news for all dental nurses and assistants in Canada. . . There is now a Canadian National Association—inaugurated at the Western Canada Dental Nurses' and Assistants' Convention in Winnipeg in June 1945, in which any girl in an ethical dental office, anywhere in Canada, may become a member.

If you are in a small town or village and have no local association nearby to which you may belong, then you may become an Independent Member of this new National Association and enjoy the fellowship gained thereby. The purpose is to unite all local societies and dental nurses and assistants in isolated places into one large body, interested in the calling they have chosen.

The fee has not been set as yet, but it will be small, so as not to be a burden on any salary. All that is needed is your interest and co-operation, to make this a successful Dominion-wide Association. There will be ways and means of increasing your efficiency to your dentist.

Almost all the local societies across Canada have already affiliated with this new or-

ganization, but the interest of every dentist and his assistant is necessary to make this new venture a success.

Tell your dentist about it, and if you are interested, write the President or the Secretary-Treasurer for further details.

President: MRS. MARION EDWARDS, R.N.

760 Spadina Ave., Toronto 4, Ontario

Secretary-Treasurer: MRS. IREAN C. BRUCE
2849A Dundas St. West, Toronto 9, Ontario

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Mid Winter Clinic in Seattle

The Washington State Dental Association and the Seattle District Dental Society held a joint annual meeting and three day Mid Winter Clinic January 31 to February 2, 1946, at the Olympic Hotel in Seattle, Wash.

In attendance were some 815 dentists, 80 of whom were Canadians.

Dr. Bob Stuart of Vancouver was asked by Vancouver dentists cross this line today, who one of the officials at the border "If any more do you think will take care of the toothaches in Vancouver for the next few days?"

Dr. Bill Millburn, President of Victoria Dental Society, and Dr. Chambers, President of Vancouver Dental Society, were both present.

Popular amongst clinics were those given by Vancouver dentists: Dr. Walter Sproule on gold foil; Dr. Harold Cline, Dr. John R. Ingledew and Dr. G. D. Stibbs on radiodontic technique.

One of the outstanding speakers at the occasion was Dr. Ernest M. Jones, new Dean of the recently established Dental Department of the University of Washington. Speaking to some 700 dentists at breakfast, Dr. Jones said "Our solution and treatment of dental caries is the direct service we give to the public, and our service is a high order of technical skill."

Arousing considerable interest were the round table discussions on Nutrition by Michael Walsh M. Sc. of San Diego, Cal. Dr. Walsh repeatedly expressed the opinion that "The oral cavity is not an entity but an integral part of the body as a whole and its environment."

There was an opportunity to observe clinics and illustrated lectures on every phase of dentistry.

The program concluded with a gala banquet and cabaret entertainment in the Spanish Ballroom of the Olympic Hotel.

Such a convention as this Mid Winter Clinic held in Seattle where dentists of two countries have an opportunity to meet and exchange ideas, contributes much to the advancement of good dentistry. Such exchange of ideas is in no small measure responsible for the high order of dentistry practised in both countries.

—MAUDE SPENCE HOLWAY of Seattle.

Erythrocyte Count

Eli H. Siegel, U.S. Navy Dental Clinic, reports in the *Journal of Dental Research*, (personal opinion and not opinion of Navy Department officially) that in making blood tests on 100 young adult males with either chronic marginal gingivitis, Vincent's gingivitis, or extensive alveoclasia, and using 75 individuals without periodontal disease as controls, that those with periodontal disease had an average lower total erythrocyte count, the count arising to normal following arrest or cure of the pathological processes.

The findings indicate that chronic periodontal disease can be a cause of physical debility and reduced efficiency, and that changes in the erythrocyte count during treatment of periodontal disease may be used as an objective laboratory guide in judging the progress or success of treatment.

The fact that chronic periodontal disease is to be considered a possible contributing factor or cause of mild anaemia is also indicated.

The Expanding Field of Physical Medicine

F. H. Krusen, M.D. in Proceedings of the Staff Meetings of the Mayo Clinic states that it is becoming more and more apparent that physical therapy or the more inclusive term physical medicine is expanding rapidly and must be considered as a separate and distinct medical specialty. It is really applied biophysics and includes the employment of the physical and other effective properties of light, heat, cold, water, electricity, massage, manipulation, exercise and mechanical devices for physical and occupational therapy in the diagnosis and treatment of disease.

The chief needs for proper development of

physical medicine are three: (1) an adequate supply of physicians who can teach and use physical medicine; (2) more extensive basic and clinical research; (3) proper use of physical medicine in relation to wartime rehabilitation. Mr. Baruch the elder statesman and humanitarian gave the initial sum of \$1,100,000 to activate this program. Columbia University College of Physicians and Surgeons was given the sum of \$400,000 to establish a model centre for basic research and teaching of physical medicine. Additional centres have been established in many other universities.

Dr. Krusen visited a number of research laboratories and reports most interesting progress in electrophysics as related to medicine in the postwar world. He refers to a new 100,000,000 volt electron accelerator which will open up a whole new field in the realm of physical medicine. New type of electronic tubes, in heating of human tissues will prove a fertile field for investigation. Great progress is being made in the true structure of the protein molecule which will revolutionize the chemistry of protein. He mentions also among other interesting discoveries a photo-electric recorder which can measure accurately periods of time from one ten-thousandth of a second up to three seconds which can be used medically to study reaction times. Then there is the electron microscope by which one can get a clear picture of an object which has been magnified 75,000 to 100,000 times. Great possibilities are reported with regard to the quick sterilization of surgical instruments by means of high frequency coils. In "Flash pasteurization" of milk it can be heated to a temperature of 190 degrees F. in four-fifths of a second.

The Mayo Foundation and the Department of Biologic Engineering at Massachusetts Institute of Technology have developed a plan which will permit certain of the better qualified young physicians who are taking the regular fellowship in physical medicine to spend a quarter of a year at the Massachusetts Institute of Technology studying biophysics, electronics, and instrumentation as related to medicine which should prove a distinct step forward in utilizing more fully the amazing new physical instruments which will soon be available for research, for medical diagnosis and for therapy.

IN MEMORIAM

Leigh A. Langstroth of Saint John, New Brunswick, died February 10. He was graduated from the Philadelphia College of Dentistry in 1899.

He was a past master of Albion Lodge, No. 1, A.F. and A.M., and was also secretary for some years of the Carleton Royal Arch Chapter. A year ago he was presented with a life membership in No. 174 Saint John Civilian Rifle Association. In 1896 and 1900 he was named to Canada's Bisley team for the Empire meet. He was an enthusiastic hunter and fisherman. At one time he was President of the Thistle Curling Club. He was an authority on stamps and coins having a valuable collection of both, and a favourite hobby was weaving with the hand loom.

Dr. Langstroth is survived by his widow, one daughter and one son, Lt.-Col. Langstroth.

Richard J. Ross of Regina, Saskatchewan, aged 55, died February 7. He was graduated from Northwestern University in Chicago in 1916. He served with the Dental Corps in the First Great War, returning to Regina in 1919 when he entered practice with his brother, Dr. W. H. Ross. At the outbreak of the Second Great War he was commissioned as a captain in the Canadian Dental Corps. He was invalided out of the service in the fall of 1943.

Dr. Ross was unmarried and is survived by two brothers and two sisters.

W. Chalmers McNichol of High River, Alberta, aged 48, died February 6, following an illness of several months. He was graduated from the Royal College of Dental Surgeons of Toronto in 1925 and commenced practice in High River.

He was Chairman of the Foothills Health Division and Chairman of the High River Sports Committee. In earlier years he was coach of High River Senior Hockey Team

and served as councillor throughout the depression years administering the municipal relief department with greatest efficiency. He was a member of Rotary and had given leadership in all phases of town advancement for the past twenty years.

Dr. McNichol is survived by his widow and three sons, a brother and a sister.

Wesley Richardson of Vancouver, British Columbia, aged 84, died February 13. His death resulted from an explosion in his laboratory where he is believed to have been sterilizing instruments over a gas plate when the blast occurred. Passers-by wrapped clothing about his blazing garments when he ran from his office.

He was the oldest practising dentist in Vancouver. He was a music lover and lead church choirs. He had lead his high school glee club back in Ontario.

Gilbert Cave Macphail of Saint John, New Brunswick, aged 64, died February 2. He practised in Saint John since 1920, having practised previously in the United States. He was a member of Hibernia Lodge No. 3, A.F. and A.M.; the Havelock Lodge, No. 27, L.O.L.; and the Saint John and New Brunswick Dental Societies. He attended Portland United Church.

Dr. Macphail is survived by his widow, a son, a daughter, a sister and two brothers.

Daniel Edwin Russell of Hamilton, Ontario, aged 77 died December 1. He was graduated from the Royal College of Dental Surgeons of Ontario in 1893. He practised at Hamilton, Cayuga, Chatham, Brantford, and again at Hamilton from 1925 until the time of his death.

He was a member of the Shrine Club, Brantford, and was Past Grand Lodge Officer in the Masonic Order. He was an honorary member of the R.C.D.S.

Le Traitement De La Paradentose Et Ses Diverses Tendances.

(Suite)

Par: J. THEBAUD, D.D.D.; L.D.S.; M.Sc.D.; A.I.D.O.;
F.I.C.D.; F.A.P.H.A.; L.L.L.; L.L.D. (h.c.)

La tendance actuelle qui consiste à s'attaquer à la cause ou aux différentes causes du mal, S'INTERESSANT EN MEME TEMPS AU PROCESSUS PATHOLOGIQUE, nous porte à préciser qu'il s'agit ici de causes purement locales, telles que l'état non hygiénique de la bouche, la malocclusion, la présence de pièces défectueuses, l'absence de contact proximal, etc.

Malheureusement, pour ce qui a trait aux causes générales, qui prédisposent à la paradentose, nous ne relevons jusqu'ici, aucune tendance marquée. Il y a lieu d'espérer que des recherches viennent préciser l'attitude du médecin appelé à seconder lui-même l'intervention du dentiste. On incline à croire que les troubles endocriniens, parathyroïdiens principalement, les troubles circulatoires, hépatiques rénaux, l'avitaminose et l'acidose favorisent les paradentopathies; mais jusqu'ici aucun test en médecine générale ne permet de préciser dans un cas donné de paradentose, la cause ou les causes systémiques qui entrent en jeu. Nos moyens sont donc presque inopérants dans ce domaine.

Quand on s'orientera vers une thérapeutique générale, en vue de combattre à coup sûr les causes prédisposantes générales une autre tendance opportune sera créée, et le traitement de la paradentose aura franchi ainsi une ère nouvelle.

Mais en attendant, il est bon de préciser notre attitude dans une sphère d'action scientifique, d'unifier nos efforts en vue de rendre les méthodes de traitement plus rationnelles et plus pratiques.

Bien qu'ils soient en marge de la thérapeutique générale que peut recommander le médecin, les soins du dentiste quand ils ne sont pas radicaux, visent à obtenir une cure à longue échéance, ce qui présente pour nous un intérêt qui ne saurait être négligé.

Il existe actuellement un courant d'opinions qui porte tout un chacun à déclarer que TOUTES LES METHODES EMPLOYEES SONT BONNES. Ce raisonnement est mal fondé. Il serait singulièrement prétentieux de faire ici le procès de certaines méthodes, mais plusieurs sont tombées d'elles mêmes en désuétude, parce qu'elles sont contraires à la logique des faits observés et qu'elles ne répondent nullement aux données biologiques actuelles.

Pour être plus à même d'apprécier l'excellence de certains modes de traitement sur d'autres, mettons-nous d'accord sur les notions scientifiques qui se rapportent au

processus pathologique de la périodontoclasie, afin de pouvoir analyser certains points de vue tout récemment exprimés. Par exemple, Sorrin et Burman considèrent le pronostic plus favorable chez les personnes âgées que chez les adultes. Orban prescrit qu'il ne faut pas pratiquer l'ablation totale des masses granuleuses. Williams et d'autres considèrent le repli ou creux gingival normal comme étant le criterium de l'équilibre physiologique du paradentium et Bunting décrit dans son ouvrage la forme non-purulente de la pyorrhée.

En se basant sur les connaissances actuelles, il convient de considérer en premier lieu, l'intégrité du creux gingival; c'est là le premier point de repaire. En effet, il se produit d'abord une désorganisation de l'épithélium qui tapisse le fond du repli gingival avec une émigration massive des cellules épithéliales au sein de la membrane périodentaire, dans le sens apical. Ces cellules épithéliales s'organisent en grappes, entre les fibres de la membrane, au point d'entraîner leur détachement du bord alvéolaire. Cette désorganisation du pavé épithélial au creux gingival forme des brèches qui facilitent dans la suite, la pénétration des microorganismes et l'infection des tissus superficiels.

Avec la rupture des fibres gingivales, il s'établit un déséquilibre dans l'articulation de la dent, d'où excès de pression sur l'une des parois alvéolaires, ce qui inévitablement déclenche l'action des ostéoclastes. L'ostéolyse prend une allure plus ou moins rapide suivant la nature des causes locales et l'intensité des forces anormales qui entrent en jeu.

La désorganisation des fibres du groupe cervical permet l'effondrement du repli gingival dont la base constitue à ce moment une zone d'infection latente qui suit les capillaires et les lymphatiques du ligament alvéo-dentaire, dans une direction serpentineuse. Devant cette zone d'infection qui tend à s'agrandir, puisque le clapier ou cul-de-sac est constitué à cette phase, la nature dans un mouvement de défense permet l'élaboration massive de cémentoblastes, de fibroblastes et de leucocytes mononucléaires sous forme de masses granuleuses.

La prolifération d'éléments fibreux est si intense, qu'elle envahit les autres éléments à la manière des parasites végétaux. C'est ce qui donne raison à Box de Toronto, quand il parle de périodontite raréfiante fibreuse, et aux autres auteurs qui décrivent l'halistérie osseuse.

Si nous acceptons ceci comme le TABLEAU CLASSIQUE DE LA DESINTEGRATION DU PARADENTIUM, nous devons retenir quatre faits:

- 1° L'ostéolyse des bords alvéolaires.
- 2° La formation de masses granuleuses de "Monos".
- 3° La présence de clapiers.
- 4° L'état pathologique de la gencive en tant que tissu de support.

Quelque paradoxal que cela puisse paraître LA PRESENCE DE PUS ou de sécrétion purulente, est maintenant considérée comme un fait accessoire. Le terme pyorrhée qui se rapporte à l'idée d'écoulement de pus n'est conforme qu'à l'un des symptômes de la maladie scientifiquement impropres.

LA FORME SECHE NON PURULENTE, comme on le suppose, s'explique du fait que les microorganismes logés au niveau des culs-de-sac ne sont pas de nature à toujours faciliter la formation de pus, que leur symbiose n'est pas organisée, ou que les tissus gingivaux réagissent très peu à l'infection. L'infiltration de ces tissus est un état très significatif de la présence d'une condition pathologique, surtout quand ils sont hyperémisés; c'est sans doute le premier fait que l'on constate avant de poser tout diagnostic. Mais au point de vue de l'importance des lésions, c'est le moins considérable. UNE GENCIVE BOURSOUFLÉE HYPERTROPHIÉE MEME INDIQUE UNE BONNE REACTION, une excellente défense de la part des tissus et donne lieu à un pronostic plus favorable qu'une gencive pâle et anémique.

Quelque soit le rôle de la gencive considérée comme un tissu de support, le traitement ne saurait être institué sans le but unique d'en améliorer les conditions. Quand les désordres sous-jacents sont d'un caractère sérieux, l'ostéolyse, la rupture des attaches ligamentaires et la nécrose du ciment ne sont pas des lésions d'un ordre accessoire.

Que penser des auteurs qui vont jusqu'à déclarer que même lorsque la gencive est hyperémisée ou hypertrophiée, si aucune lésion osseuse n'existe, le diagnostic de paradentose peut être écarté? D'après ceux-là, il faut la concomitance des deux états pathologiques, l'ostéoclyse et l'infection des gencives pour qu'on soit à même de signaler le développement de la paradentose.

L'ostéolyse, sans la lésion des tissus mous de support, demeure une simple forme de résorption alvéolaire, soit précoce, soit sénile. D'autres part, l'état inflammatoire des gencives sans la formation des clapiers et sans l'ostéolyse répond tout simplement à une forme de gingivite.

Ainsi s'explique parfois le succès de ceux-là qui obtiennent des cures faciles. De là, nous pouvons déduire que seule le COMBINATION DES DEUX LESIONS DETERMINE LA PERICEMENTOCLASIE. Cette affection échappe à toute idée de classification.

C'est, semble-t-il, par pure fantaisie que des auteurs par rapport au degré de résorption alvéolaire ou à l'état inflammatoire des tissus superficiels, tentent de jauger les lésions paradentaires. Il est plus facile de retenir que la paradentose s'observe à la phase du début ou à une phase plus ou moins avancée. A la phase du début le TRAITEMENT PEUT ETRE RADICAL, parce que les désordres sont peu marqués.

Mais, dira-t-on, où est le mérite de celui qui entreprend le traitement des cas faciles? Un mérite très appréciable, celui de découvrir et d'arrêter à temps les premières lésions.

(à suivre)

Note Préliminaire Sur Une Nouvelle Technique D'analgésie Et D'anesthésie En Obstétrique

Par

MOISE CLERMONT, F.I.C.A., R.C.P., Chef du service d'Anesthésie à l'hôpital de la Miséricorde, Anesthésiste en chef de la Faculté de Chirurgie dentaire de l'Université de Montréal.

JACQUES GAGNON, Du service d'Obstétrique de l'hôpital de la Miséricorde.
GAGNANTS DU PRIX CASGRAIN ET CHARBONNEAU, 1945.

CONCLUSIONS

Dans l'état actuel de nos connaissances, l'association pentothal-protoxyde-oxygène aux doses indiquées, est appelée à rendre d'immenses services aux accoucheurs, même aux praticiens à domicile, puisqu'ils ne peuvent pas toujours instituer chez leurs pa-

tientes un traitement aussi complet que l'anesthésie caudale ou l'anesthésie rachidienne, qui chacune ont leurs indications propres.

Ces notes ne sont que les préliminaires, en attendant que des statistiques plus nombreuses viennent compléter nos dossiers.

Même si parfois le pentothal en instillation rectale n'atteint pas toujours le degré analgésique demandé, toujours cependant il conserve son action élective sur le col et le périnée, et en provoquant la dilatation rapide et le relâchement et, de cette façon, toujours il raccourcit la période de travail si pénible pour la mère, et parfois si embarrassante pour le médecin.

Cependant, cette technique a ceci d'avantageux que la patiente n'absorbe aucun produit par la bouche, est dans un état de préparation plus rationnel en vue de l'anesthésie par inhalation, moins exposée aux nausées et aux vomissements, et peut être, sans crainte, dirigée vers une opération majeure telle la césarienne, si l'urgence s'en présentait.

En résumé, nous vous présentons une nouvelle méthode d'analgésie et d'anesthésie en obstétrique par l'association de pentothal-protoxyde d'azote-oxygène. Instillation rectale de pentothal pour les deux premières périodes de l'accouchement complétée par l'inhalation d'un mélange protoxyde d'azote-oxygène dans la proportion de pas moins de 20%.

Nous devons, aujourd'hui plus qu'en tout autre temps, prendre en considération le pourcentage des naissances et la mortalité maternelle, et c'est notre devoir, en tant qu'anesthésistes ou accoucheurs, en autant que c'est en notre pouvoir, de contribuer à la sécurité de la mère et de l'enfant.

L'importance d'un anesthésiste expert dans la pratique obstétricale est souvent méconnue ou volontairement ignorée, même dans les services hospitaliers de nos meilleurs hôpitaux, et il est plus que temps que le public et la profession médicale réalisent leur responsabilité dans ce champ d'action.

D'autres avant nous, ont lancé un appel en faveur de l'anesthésie en obstétrique. Dans chaque cas d'obstétrique où on a à administrer un anesthésique, ce devrait être assez important pour que nous y exercions le plus grand soin. Nous savons en effet qu'occasionnellement, le cas qui semblerait le plus favorable peut se terminer d'une tragique façon.

Nous remercions sincèrement le professeur H. Sanche de sa bienveillante autorisation et des nombreux conseils que son expérience nous a dictés dans la poursuite de nos travaux. Nous remercions également les autorités hospitalières et le personnel de l'hôpital, et tous les médecins, spécialement les chefs de services, de leur appui et du matériel humain mis à notre disposition.

Le pentothal a été gracieusement fourni par la Maison Abbott.

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16. "Barbiturates with Scopolamine in Obstetrics. *Queries and Minor Notes.*" *Journal Amer. Med. Ass.*, oct. 43.
17. W. O. McQUISTON et S. C. CULLEN et E. V. COOK: "Arterial Oxygen Tension with Nitrous Oxide Anesthesia." *Anesthesiology*, mars 1943.
18. K. C. MCCARTHY: "The Relationship of Nitrous Oxide Anesthesia and Anoxia." *Proc. Roy. Soc. Med. (Section of Anesthetics)*, août 1941.

Université de Montréal

Faculté de Chirurgie Dentaire

COURS DE PERFECTIONNEMENT en COURONNES & PONTS

DUREE DU COURS: 5 jours.

DATE DU COURS: du 1^{er} avril au 6 avril 1946.

FRAIS D'INSCRIPTION: \$100.00.

INSCRIPTION LIMITEE à: 8.

Ce cours portera sur les incrustations et leur application dans la fabrication des ponts. Il comprendra l'étude théorique et pratique de la préparation des piles, de la couronne $\frac{3}{4}$, de la préparation de la cire, de la mise en revêtement et de la coulée.

Le pont fait au moyen de substances acryliques sera étudié à fond et toutes les phases de sa préparation, telles que les empreintes, les modèles, la préparation de la cire, l'ajustement des timbres et de la barre d'appui, le soudage, le bourrage et la cuisson seront démontrées et pratiquées par les candidats sur des mannequins mis à leur disposition par la Faculté.

Des tours électriques ainsi que tout le matériel nécessaire seront fournis par la Faculté, à l'exception des pièces à main, contre-angles, disques à séparer, fraises, ciseaux, bol à plâtre, spatules, anneaux à couler et bases.

PROGRAMME DU COURS.

DATE	LOCAL	HEURE	COURS	SUJET	CLINICIEN
Lundi, le 1er avril	salle de cours	9.00 10.30	Théorique	Considérations générales sur le pont. Couronne $\frac{1}{2}$ (préparation)	Dr J. P. Trottier
Lundi, le 1er avril	salle de cours	10.45 12.00	Théorique	Incrustation et ses applications (préparation)	Dr M. Robichaud
Lundi, le 1er avril	amphithéâtre	2.00 5.00	Clinique	Préparation: couronne $\frac{1}{2}$ & incrustation. Cire (indirect-direct)	Dr J. P. Trottier Dr A. Renaud Dr M. Robichaud
Mardi, le 2 avril	salle de cours	9.00 10.00	Théorique	Préparation de la cire mise en revêtement, coulée	Dr J. P. Trottier
Mardi, le 2 avril	laboratoire	10.15 12.00	Laboratoire	Applications pratiques	Dr J. P. Trottier Dr J. A. Renaud Dr M. Robichaud
Mardi, le 2 avril	salle de cours	2.00 3.00	Théorique	Propriétés générales. Substance acrylique	Dr G. LeFrançois
Mardi, le 2 avril	amphithéâtre. central	3.30 5.00	Clinique	Coiffe & Pont. Instrumentation & Technique	Dr J. P. Trottier Dr M. Robichaud Dr G. LeFrançois
Mercredi, le 3 avril	amphithéâtre; central	9.00 10.30	Clinique	Coiffe. Impression & Modèle	Dr J. P. Trottier Dr M. Robichaud Dr G. LeFrançois
Mercredi, le 3 avril	amphithéâtre. central	10.30 12.00	Clinique	Pont (Impression & Modèle)	Dr J. P. Trottier Dr A. Renaud Dr M. Robichaud Dr G. LeFrançois
Mercredi, le 3 avril	laboratoire	2.00 5.00	Laboratoire	Cire Mise en revêtement. Bourrage, Cuisson	Dr J. P. Trottier Dr M. Robichaud Dr G. LeFrançois
Jeudi, le 4 avril	laboratoire	9.00 11.00	Laboratoire	Cire Mise en revêtement: timble pont. Coulée	Dr J. P. Trottier Dr A. Renaud Dr M. Robichaud
Jeudi, le 4 avril	amphithéâtre. central	11.00 12.00	Clinique	Suggestions pour partiels	Dr L. Laporte
Jeudi, le 4 avril	laboratoire	2.00 3.00	Laboratoire	Ajustement des timbles ajustement de la barre : pont Soudage de la barre	Dr J. P. Trottier Dr M. Robichaud Dr G. LeFrançois
Jeudi, le 4 avril	amphithéâtre. central laboratoire	3.30 5.00	Clinique & Laboratoire	Ajustement en bouche : pont Sculpture de la cire	Dr J. P. Trottier Dr M. Robichaud Dr G. LeFrançois
Vendredi, le 5 avril	laboratoire	9.00 12.00	Laboratoire	Mise en revêtement. Bourrage : pont Cuisson	Dr J. P. Trottier Dr M. Robichaud Dr G. LeFrançois
Vendredi, le 5 avril	amphithéâtre. central	2.00 5.00	Clinique	Mise en bouche. Coiffe & pont	Dr J. P. Trottier Dr A. Renaud Dr M. Robichaud

COURS DE PERFECTIONNEMENT

en DENTISTERIE OPERATOIRE

DUREE DU COURS: 5½ jours.

DATE DU COURS: du 8 avril au 13 avril 1946.

FRAIS D'INSCRIPTION: \$50.00.

INSCRIPTION LIMITEE à: 8.

Ce cours, à la fois théorique et pratique, portera sur l'anatomie et physiologie buccales en rapport avec la dentisterie opératoire, la préparation des cavités, la mise en place de la digue, les substances obturatrices (incrustations, silicates, amalgames) les revêtements, l'examen et le diagnostic, la radiographie et son emploi en dentisterie opératoire et la cause des échecs en dentisterie opératoire.

Les tours électriques ainsi que tout le matériel nécessaire seront fournis par la Faculté à l'exception des pièces à main, ciseaux à émail, curettes, crampons, etc.

HORAIRES.

DATE	HEURE	COURS	SUJET	CLINICIEN
Lundi, le 8 avril	9.00 10.00	Théorique	Considérations générales	Dr J. P. Lantier
Lundi, le 8 avril	10.15 11.15	Théorique	Anatomie et physiologie buccales en rapport avec la dentisterie opératoire. Rapport de la structure histologique des dents avec la dentisterie opératoire.	Dr G. Gauthier
Lundi, le 8 avril	11.30 12.30	Théorique	Préparation des cavités	Dr J. P. Trottier
Lundi, le 8 avril	2.00 5.00	Travaux pré-cliniques	Préparation des cavités sur dents de plâtre et sur dents extraites. Démonstration de la mise en place de la digue	Dr J. A. Renaud Dr J. P. Trottier Dr M. Archambault Dr J. Olivier & personnel Dr J. P. Lantier
Mardi, le 9 avril	9.00 10.00	Théorique	Substances obturatrices - Revêtements	Dr J. A. Renaud
Mardi, le 9 avril	10.15 12.30	Clinique	Interventions sur patients	Dr J. P. Lantier Dr J. A. Renaud Dr J. P. Trottier Dr M. Archambault Dr J. Olivier & personnel
Mardi, le 9 avril	2.00 5.00	Clinique	Interventions sur patients	Dr J. P. Lantier Dr J. A. Renaud Dr J. P. Trottier Dr M. Archambault Dr J. Olivier & personnel
Mercredi, le 10 avril	9.00 10.00	Clinique	Examen et Diagnostic	Dr A. L'Archevêque
Mercredi, le 10 avril	10.15 12.30	Clinique	Interventions sur patients	Dr J. P. Lantier Dr J. A. Renaud Dr J. P. Trottier Dr M. Archambault Dr J. Olivier & personnel
DATE	HEURE	COURS	SUJET	CLINICIEN
Mercredi, le 10 avril	2.00 5.00	Clinique	Interventions sur patients	Dr J. P. Lantier Dr J. A. Renaud Dr J. P. Trottier Dr M. Archambault Dr J. Olivier & personnel
Jeudi, le 11 avril	9.00 10.00	Clinique	Radiologie: son emploi en Dentisterie opératoire	Dr M. Archambault
Jeudi, le 11 avril	10.15 12.30	Clinique	Interventions sur patients	Dr J. P. Lantier Dr J. A. Renaud Dr J. P. Trottier Dr M. Archambault Dr J. Olivier & personnel
Jeudi, le 11 avril	2.00 5.00	Clinique	Interventions sur patients	Dr J. P. Lantier Dr J. A. Renaud Dr J. P. Trottier Dr M. Archambault Dr J. Olivier & personnel
Vendredi, le 12 avril	9.00 12.30	Clinique	Interventions sur patients	Dr J. P. Lantier Dr J. A. Renaud Dr J. P. Trottier Dr M. Archambault Dr J. Olivier & personnel
Vendredi, le 12 avril	2.00 5.00	Clinique	Interventions sur patients	Dr J. P. Lantier Dr J. A. Renaud Dr J. P. Trottier Dr M. Archambault Dr J. Olivier & personnel
Samedi, le 13 avril	9.00 10.00	Théorique	Causes des échecs en Dentisterie opératoire Discussion	Dr J. P. Lantier
Samedi, le 13 avril	10.15 12.30	Clinique	Interventions sur patients	Dr J. P. Lantier Dr J. A. Renaud Dr J. P. Trottier Dr M. Archambault Dr J. Olivier & personnel

Rapport sur les Statistiques Dentaires de la Province de Quebec, 1938-1944

VIGER PLAMONDON, D.D.S., M.Sc.D., Quebec
1er février 1946.

PLAN DU RAPPORT SUR LES STATISTIQUES DENTAIRES DU QUEBEC 1938-44.

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|-------------------------------------|--|
| 1—But. | 13—Centre d'affaires. |
| 2—De quoi est-il fait? | 14—Industries principales. |
| 3—Informations. | 15—Education dentaire. |
| 4—Cartes routières provinciales. | 16—Publication. |
| 5—Nombre des licenciés en 1938-40. | 17—Associations dentaires majeures. |
| 6—Nombre des licenciés en 1940-42. | 18—Sociétés dentaires scientifiques locales. |
| 7—Nombre des licenciés en 1942-44. | 19—Société dentaire commerciale. |
| 8—Taux de la population. | 20—Corps dentaire canadien. |
| 9—Hôpitaux. | 21—Longévité de pratique. |
| 10—Unités sanitaires. | 22—Légende. |
| 11—Cliniques dentaires municipales. | 23—Conclusions. |
| 12—Moyens de communication. | |

M. le Président,

Messieurs les Gouverneurs,

Conscient de l'énorme tâche qui nous a été assignée par ce Bureau Provincial de Chirurgie-Dentaire, à son assemblée du 2 mars 1945, de préparer un relevé général de la profession, et ce, à la demande de l'Association Dentaire Canadienne; section du placement et du rétablissement des confrères des forces armées, nous nous sommes mis à la besogne immédiatement, sachant bien que nous avions affaire à un travail ardu et de longue haleine.

BUT,

Puisse ce rapport atteindre le but proposé, savoir:

- 1—Connaître où nous en sommes avec la profession dentaire en général dans cette province.
- 2—Venir en aide aux confrères des forces armées afin de faciliter leur retour à la vie civile.
- 3—Faire ressortir les lacunes existantes, chercher les moyens de correction, ouvrir de nouveaux horizons.
- 4—Pouvoir guider les nouveaux licenciés dans le choix d'endroits propices à l'ouverture de leurs nouveaux bureaux.

DE QUOI EST-IL FAIT?

Nous avons essayé de réunir en un tableau tout ce qui a trait à notre profession, sans nous occuper des métiers ou commerces qui en découlent souventes fois. Disons tout de suite que ce travail se divise en quatre grandes lignes:

- 1—Il indique le nombre des licenciés depuis le début de la guerre jusqu'au 31 décembre 1944.
- 2—Il mentionne les hôpitaux de la province.
- 3—Il donne une idée des Unités Sanitaires Provinciales.
- 4—Il enseigne notre richesse en Cliniques Dentaires Municipales.

Pour arriver à ces fins, nous nous sommes servis de comparaisons entre les comtés, leurs populations et les licenciés tant praticiens que dans les forces armées. C'est pourquoi la.

1^{ère} colonne du grand tableau vous donne la liste officielle de tous les comtés de la Province à l'exception de Montréal et de Québec qui réunissent plusieurs comtés, (Voir plus loin pour détails.)

2^è vous montre leur population respective.

3^è vous fait voir le nombre des licenciés qui en 1938-40 étaient:

a) — praticiens.

b) — dans les forces armées.

4^è démontre la même subdivision avec cette différence qu'elle se rapporte aux années 1940-42.

5^è a trait au terme d'office 1942-44 avec les détails suivants:

a) — Les décédés,

b) — Les résignations,

c) — les réinscrits,

d) — les praticiens civils,

e) — les militaires.

6^è vous donne la proportion de population par chirurgien-dentiste et par comté.

7^è vous indique les sociétés dentaires existantes dans le comté.

8^è vous fait voir à quelle division électorale dentaire appartient tel ou tel comté de la province.

9^è vous donne le centre d'affaires du comté.

10^è vous énumère au moins ses trois principales industries.

11^è a trait aux hôpitaux du comté avec

a) — leur nombre,

b) — avec ou sans clinique dentaire,

c) — avec ou sans dentiste attaché au service,

d) — leur localité.

12^è vous explique les mêmes détails que la précédente avec cette différence que le tout se rapporte aux Unités Sanitaires de la Province.

13^è vous fait voir où il existe des Cliniques Dentaires Municipales avec le nombre de chirurgiens-dentistes qui en font partie.

14^è vous donne une vaste idée des moyens de communications existant dans chaque comté.

INFORMATIONS.

Afin de vous fournir des faits véridiques, nous vous indiquerons maintenant quelles furent nos sources officielles de renseignements. Les voici:

a) — L'Annuaire des Statistiques de la Province de Québec, édition 1942-43.

b) — Les rapports du Régistraire du Collège pour les termes d'office 1938-40, 1940-42, 1942-44.

c) — Les listes officielles des membres du C.C.—D.P.Q. publiées par le Régistraire du Collège 1938-40, 1940-42, 1942-44.

d) — Le Guide Touristique de la Province de Québec, publié par le Ministère de la Voirie, Québec.

e) — Le Guide Officiel des Chemins de Fer du Canada, édition 1944.

f) — Le Guide Officiel des lignes d'Aviation des compagnies Trans-Canada Air Lines & Québec Airways.

g) — Les prospectus des facultés dentaires des Universités:

a) — De Montréal.

b) — McGill.

h) — La liste des Unités Sanitaires Provinciales, Ministère de la Santé.

i) — Lettres aux villes de Montréal & Québec, Service de Santé.

- j)—Cartes routières de la Province, Ministère de la Voirie.
 k)—Soixante-sept lettres circulaires adressées à un confrère dans chacun des comtés de la province, lettres contenant un questionnaire de (33) trente trois demandes d'informations. Pour compliquer ce travail ardu, quatorze (14) confrères n'ont pas daigné répondre, trop intéressés sans doute aux choses de la profession. Nous avons dû chercher ailleurs les renseignements désirés.

CARTES ROUTIERES.

Veut-on avoir une vue à vol d'oiseau, un coup d'oeil général et rapide sur la répartition des chirurgiens-dentistes de cette province? La chose vous est rendue facile puisque nous avons préparé pour vous, au moyen de cartes routières provinciales, un tableau rétrospectif en plaçant une étoile rouge sur les endroits où il y avait au moins un dentiste pratiquant en 1944. Dans les carreaux détaillant les districts de Montréal et de Québec, nous avons placé de gros chiffres représentant le nombre total des praticiens de ces deux arrondissements afin d'en simplifier et le travail et la compréhension. Puissent ces cartes faciliter le travail de ceux qui sont préposés au rétablissement de nos anciens combattants en même temps que guider ceux-ci dans le choix d'un bureau, hors de Montréal. Ces cartes sont en quelque sorte le complément du grand tableau.

NOMBRE DES LICENCIES 1938-40.

Durant l'exercice de ces années, il y avait (878) huit cent soixante-dix-huit licenciés inscrits au Collège. De ce nombre, (31) trente et un se sont enrolés; soit 3.6%. On comptait aussi (2) deux licenciés de notre Province pratiquant hors du Québec. D'un autre côté, nous avons eu à déplorer la perte de (14) quatorze confrères pendant que (7) sept autres ont résigné comme dentistes. Ce fut avec plaisir que nous avons réinscrit (4) quatre confrères comme membres de ce collège et que (3) trois autres furent faits membres honoraires. Cependant le Collège eut à suspendre (34) trente-quatre confrères pour arrérages de la contribution annuelle. Au cours du même terme, (65) soixante-cinq étudiants furent admis à l'étude de la profession, tandis que (48) quarante huit étaient reçus chirurgiens-dentistes. Au point de vue linguistique, la proportion des licenciés était ainsi partagée:

a)—239 de langue anglaise,

b)—637 de langue française.

Le tout était réparti en (5) cinq divisions électorales dentaires, comprenant:

1—Montréal-est	avec	353	licenciés	représentés	par	13	gouverneurs.
2—Montréal-ouest	"	297	"	"	"	10	"
3—Trois-Rivières	"	44	"	"	"	2	"
4—St-François	"	48	"	"	"	2	"
5—Québec	"	134	"	"	"	2	"

De plus, (2) deux représentants Universitaires

a) —McGill " 1 "

b)—Montréal " 1 "

NOMBRE DE LICENCIES EN 1940-42.

Pendant ce terme, le Collège comptait 949 licenciés; soit une augmentation de 71 sur l'exercice précédent. Cet accroissement se faisait aussi sentir sur le nombre des confrères entrés au service de Sa Majesté, puisque leur nombre de 31 en 1938-40 fut porté à 116 en 1940-42; soit une moyenne de 12.3%. Nos licenciés pratiquant hors du Québec se chiffraient alors à 9; soit une majoration de 7. D'un autre côté, la mort nous ravissait 12 confrères pendant que 6 autres résignaient comme membres actifs. Le Collège dut suspendre 23 confrères pour arrérages de la contribution annuelle; soit une diminution de 11 sur l'exercice précédent. Au cours de cette période de 1940-42,

le Collège admettait 77 étudiants à l'étude de la profession alors que 59 autres obtinrent leurs licences. Dans le premier cas ce fut une augmentation de 12 et dans le second un accroissement de 11.

Au point de vue linguistique, la répartition se faisait ainsi:

- a) —264 de langue anglaise; soit une majoration de 25 sur 1938-40
- b) —676 de langue française; soit une majoration de 39 sur 1938-40

Les divisions électorales dentaires furent les mêmes qu'en 1938-40, mais le nombre de leurs membres respectifs était porté à:

1—Montréal-Est	367 licenciés	augmentation de 14 sur 1938-40
2—Montréal-ouest	317 licenciés	augmentation de 20 sur 1938-40
3—Trois-Rivières	57 licenciés	augmentation de 13 sur 1938-40
4—St-François	55 licenciés	augmentation de 7 sur 1938-40
5—Québec	148 licenciés	augmentation de 14 sur 1938-40

Le nombre des gouverneurs est demeuré le même, mais plusieurs figures nouvelles firent leur apparition.

NOMBRE DES LICENCIES EN 1942-44.

Le Collège inscrivait alors 990 licenciés: soit une augmentation de 41 sur 1940-42 et de 112 sur 1938-40. Sur ces 990 licenciés, 198 étaient au service de Sa Majesté; soit 20% de la profession. D'un autre côté, 12 confrères inscrits au C.C.-D.P.Q. pratiquaient hors du Québec; soit une majoration de 3 sur 1940-42. Si le nombre des licenciés a augmenté au cours de 1942-44, le nombre des décès a subi la même ascension puisqu'il fut porté de 12 en 1940-42 à 18 en 1942-44. Il en fut de même pour les résignations, de 7 en 1940-42 il atteignait 11 en 1942-44; tandis que les réinscrits subissaient une diminution, de 6 en 1940-42 il n'était que de 3 en 1942-44.

Pendant l'exercice de ce terme, 4 confrères furent faits membres honoraires. Le Collège n'eut que 9 cas de suspension; soit une diminution de 14 sur 1940-42 et de 25 sur 1938-40. On notait d'autre part 108 étudiants admis à l'étude de la profession pendant que 72 autres étaient reçus praticiens.

Au point de vue linguistique, la répartition se faisait de la manière suivante:

- a) —277 de langue anglaise; soit une augmentation de 13 sur 1940-42
- b) —701 de langue française; soit une augmentation de 25 sur 1940-42.

Les divisions électorales et le nombre des gouverneurs furent les mêmes que pour les exercices précédents, mais le nombre de leurs électeurs respectifs atteignait:

<i>Divisions</i>	<i>Licenciés</i>	<i>Augmentation Sur 1940-42</i>	<i>Augmentation Sur 1938-40</i>
1—Montréal-est	375	8	22
2—Montréal-ouest	334	17	37
3—Trois-Rivières	59	2	15
4—St-François	58	3	10
5—Québec	152	4	18

TAUX DE POPULATION.

Sur une population provinciale de 3,331,882, il y avait 723 licenciés qui pratiquaient en 1944; ce qui fait une proportion de 4,608 personnes par chirurgien-dentiste. C'est là une des raisons de l'encombrement dans tous les bureaux durant la guerre. Remarquons aussi que ce n'est qu'une faible partie de la population qui requiert les services du dentiste. Que serait-ce alors, si tout le monde se faisait traiter? . . . Vous voyez d'ici le surcroît de travail qui nous attend avec l'Assurance-Santé. Grâce à Dieu, nous serons bientôt secourus par les 148 confrères des forces armées. Quand tous les 990 licenciés seront à l'oeuvre, la proportion sera de 3,365 personnes par dentiste; soit une diminution de 1,243 personnes par dentiste.

Ces chiffres étant établis, que dire maintenant des comtés entiers qui n'ont pas de dentiste, bien que leurs populations soient considérables.

Voici les comtés qui n'ont pas de dentiste ou qui n'en ont qu'un avec la population:

<i>Pas De Dentiste</i>	<i>Populations</i>	<i>Un Dentiste</i>	<i>Populations.</i>
Bellechasse	26,676	Bagot	17,642
Brome	12,485	Compton	20,656
Dorchester	30,055	Deux-Montagnes	16,746
Îles de la Madeleine	8,840	Gatineau	26,784
Montmorency	13,602	Kamouraska	25,535
Wolfe	17,492	Lotbinière	26,664
Nouveau-Quebec	3,067	Matapédia	29,926
		Montcalm	14,731
		Laprairie-Napierreville	22,059
		Verchères	14,214

Quant aux autres comtés, la proportion de la population et le nombre de chirurgiens-dentistes sont clairement indiqués dans le grand tableau: voir colonne préposée à cette fin. Nous vous donnerons maintenant le nombre de dentistes, par ordre numérique, dans tel ou tel comté:

Douze comtés ont deux (2) dentistes; ce sont:

BERTHIER	L'ASSOMPTION
BONAVENTURE	L ISLET
CHATEAUGUAY	PAPINEAU
FRONTENAC	PONTIAC
HUNTINGDON	RIMOUSKI
LABELLE	ROUVILLE

Onze comtés ont trois (3) dentistes; ce sont:

ARTHABASKA	NICOLET
CHAMPLAIN	PORTNEUF
GASPE EST & OUEST	ROBERVAL
LAC ST-JEAN	VAUDREUIL-SOULANGES
LAVIOLETTE	YAMASKA
MASKINONGE	

Quatre comtés ont quatre (4) dentistes; ce sont:

ARGENTEUIL	MISSISQUOI
MATANE	MONTMAGNY

Quatre comtés ont (5) cinq dentistes; ce sont:

DRUMMOND	TEMISCAMINGUE
ST-JEAN-IBERVILLE	TEMISCOUATA

Six comtés ont (6) six dentistes; ce sont:

BEAUCE	MEGANTIC
CHAMBLY	RICHELIFU
CHARLEVOIX-SAGUENAY	SHEFFORD

Un comté à sept (7) dentistes:

JOLIETTE.

Deux comtés ont huit (8) dentistes; ce sont:

HULL, LEVIS.

Trois comtés ont neuf (9) dentistes; ce sont:

RICHMOND, ST-HYACINTHE, STAN-STEAD.

Un comté à onze (11) dentistes:

ABITIBI EST & OUEST.

Un comté à douze (12) dentistes:

CHICOUTIMI.

Un comté à treize (13) dentistes:

TERREBONNE.

Un comté à (14) dentistes:

SHERBROOKE.

Un comté à vingt-trois (23) dentistes:

ST-MAURICE.

(à suivre)

ONTARIO
DENTAL
ASSOCIATION

CANADIAN
DENTAL
ASSOCIATION

NATIONAL
CONVENTION
OF
CANADIAN
DENTISTS

ALL
CANADIAN
PROGRAM

ROYAL
YORK
HOTEL.
TORONTO.
MAY.
27TH TO 30TH
1946

THIS IS
TH' PLACE!





COL. D. S. COONS, D.D.S., O.B.E., M.M., E.D.
Hamilton, Ontario.

Director General Dental Services—Navy, Army,
Airforce.

Past President Hamilton Dental Association.

Graduated from University of Toronto, 1923.

Past District Governor of the Association of Kinsmen
Clubs of Canada.

THE TREATMENT OF MAXILLOFACIAL INJURIES IN THE MEDITERRANEAN THEATRE OF WAR

by MAJOR DOUGLAS TANNER, M.B.E., D.D.S., B. Sc. (Dent) Canadian Dental Corps

AN INCREASING number of maxillofacial injuries in the Mediterranean Theatre of War, made it necessary for a Canadian hospital to establish a service for this type of casualty. A base hospital was selected as the centre for treatment, because it possessed the necessary requirements in respect to evacuation, well equipped medical, surgical and dental services. The hospital was static, which permitted treatment for ninety days, and provided the specialized nursing care and diet required for maxillofacial patients.

The purpose of this report is to present the general principles of treatment and show exemplary histories. Much of the work was carried out under adverse climatic conditions, and diseases peculiar to the area frequently complicated treatment.

The line of evacuation was well organized and casualties arrived at the hospital four to twelve hours after injury. Their condition usually, was one of exhaustion and shock. After a preliminary clinical and radiological examination the patient was given nourishment and rest for twelve hours and shock resuscitation if necessary. When the "surgical risk" of the patient was considered satisfactory, a complete examination of injuries was done

by the medical, surgical, and dental personnel concerned in the case. As a result, a "plan of treatment" was established. This plan not only outlined the method of treatment but also the continuity of the operation.

CHARACTERISTICS OF MAXILLOFACIAL INJURIES

The more common types of injury encountered were:

1. **Civilian Type.** Injuries in this class are due to accidents, falls, fist blows, etc., and are characterized by fractures of a simple linear nature. The fracture is frequently compound, rarely comminuted, with little bone displacement or loss of tissue. There is no shock and the general condition of the patient is good.
2. **Crush Type.** As the name implies this class results from the crushing action sustained in falling buildings, motor car and airplane accidents. Multiple, comminuted fractures with great displacement are common. The soft tissues are bruised and shock may be severe.
3. **Gunshot and Shell Wound Type.** This type results from missiles travelling at high velocity resulting in grossly comminuted, compound fractures with loss of bone and soft tissue. When a bullet or shell fragment enters the

face, the entrance wound is relatively small, according to the size of the fragment. The bone becomes fractured and comminuted as a result of penetration, and fragments are carried into the soft tissues causing gross destruction. The exit wound is large and there is loss of tissue. Clothing, dirt, rubber etc., are carried into the wound by the foreign body, establishing sepsis and necessitating debridement.

FIELD TREATMENT¹

The treatment of maxillofacial injuries in forward areas must often be limited to the saving of life. Temporary alignment and fixation of soft and bone tissue may at times be possible but the prime requisite is first aid and a speedy evacuation to a surgical centre.

Establishment of an unobstructed airway is of first consideration. When there is destruction of the mandibular symphysis the genial attachment of the tongue is lost, causing it to fall backward with a resulting closure of the glottis. Swelling of the soft tissues of the floor of the mouth, blood, saliva and foreign bodies in the throat may make for difficult respiration.

The patient should be placed in a face downward position, the tongue pulled forward and the airway cleared. If the genial attachment is lost it may be necessary to pass a suture through the tongue with attachment to the face. Tracheotomy is seldom necessary but should be performed without delay when the occasion demands.

The control of haemorrhage is usually not difficult. The ligation of main vessels is infrequently indicated, as control is ordinarily attained with gauze packs.

Primary shock is not common at the time of injury but frequently develops later. The symptoms of pallor, cold sweat, weakness, shallow respiration and a rapid weak pulse should be recognized and symptomatic treatment given.

THE PRIMARY TREATMENT OF BONE INJURIES

Time permitting, some consideration should be given to the primary reduction of bone displacements. Conservation of teeth and bone is of great importance; only such fragments entirely devoid of tissue attachment should be removed. Reduction of the fragments must be done with great care to avoid pain, haemorrhage and tissue damage. Simple interdental and intermaxillary wiring is recommended for the temporary maintenance of the fragments in position. Dentures or modelling compound can be used to support the edentulous jaw. External support should always be given, preferably by means of a web headcap with an elastic bandage mandibular support. The barrel bandage offers good support but tends to work loose in transit.

Patients should always be in a face downward position, whether lying, sitting or walking. There is great possibility of death occurring due to asphyxia if the patient is in any other position.

HOSPITAL TREATMENT

The type of fighting and the nature of the terrain in Italy was conducive to physical exhaustion. Consequently, patients received rest, nourishment and resuscitation for shock prior to operation. This treatment improved the surgical risk and permitted time for consultation and careful treatment planning. Good clinical judgment was necessary to evaluate the false level of pulse and blood pressure which sometimes resulted from blood and plasma transfusions.

SOFT TISSUE SURGERY

Thorough cleansing of the mouth and face, and the establishment of anatomical landmarks was important in assessing the amount of damage and planning subsequent treatment. The loss of tissue was observed and the location of foreign bodies ascertained.

They were frequently difficult of location and their removal should not occupy too much time or result in further tissue damage.

Soft tissue wounds of the face were not excised and the conservation of tissue was most important for an aesthetic result. Fine black silk suture material was used for approximating the wound margins. Tension on the tissues was always avoided. Non-approximating wounds were left open and where gross loss of tissue existed the skin edge was sutured to the oral mucous membrane. Sulphanilamide powder was dusted into all wounds and a light vaseline gauze dressing was laid over the area. Early primary suturing of wounds was found to be most successful.

DRAINAGE

Civilian types of mandibular fractures rarely required drainage. Compound comminuted fractures resulting from gunshot or shell fragments demanded prophylactic submandibular drainage. A through and through corrugated rubber drain was inserted along the lingual side of the fracture from the mouth to the exterior. Traumatic antrostomies required intra-nasal drainage. Submandibular drains remained "in situ" until the discharge subsided, which usually required one to two weeks.

Sulpathiazole therapy was routine. Penicillin therapy was administered when major body wounds were present or when the jaw injuries were of a gross nature. Its value in the treatment of maxillofacial injuries was not established.

BONE SURGERY

The reduction and fixation of fractures diminished pain, haemorrhage and sepsis. The manipulation of bone rapidly promoted shock and was therefore reduced to a minimum. Bone fragments with soft tissue attachment

were always conserved; teeth in a fracture line were removed when they were not required for fixation; otherwise their retention until a later date was warranted. Teeth on isolated fragments were difficult of removal and were usually important for immobilization.

REDUCTION AND IMMOBILIZATION

Interdental and intermaxillary wires (S. S. 0.015") were used for the primary reduction and fixation and in favourable conditions provided the ideal permanent immobilization. Sectional impressions were taken at this time if cast metal splints were likely to be required. When the patient was under general anaesthesia and before completion of the operation, the mouth was cleansed of blood and saliva and the pharyngeal pack removed prior to pulling the intermaxillary wires taut. The nasopharyngeal tube remained in place until the patient recovered consciousness.

In grossly damaged jaws secondary fixation was necessary at a later date to maintain the space where there had been loss of tissue or to control fragments with an unfavourable muscle pull. Where reduction was not immediately obtainable, traction by means of elastic bands was necessary. Elastics were found to be unfavourable as a method of fixation as they were constantly in need of adjustment, were unsanitary and did not provide secure immobilization. It was always our object to obtain the most simple and most secure immobilization requiring the least post-operative attention. Secure immobilization favoured rapid healing of bone and no unusual limitation of mandibular movements resulted.

Various methods of fixation may be used, either alone or in combination. A solid base must first be established

to which displaced fragments will be reduced and fixed. This may be the opposing jaw or an external base such as a plaster of paris headcap. When using external fixation, the greatest possible amount of intermaxillary immobilization was sought.

Interdental eyelet wiring with intermaxillary fixation was the method of choice. This method was simple, easy of execution, secure and the correct occlusion of the teeth was readily apparent.

Cast metal (silver) splints² were an ideal means of fixation when there was extensive bone injury, few remaining teeth, where external attachment was necessary and where conditions existed which prevented the closure of the jaws for a long period e.g. (extensive intraoral soft tissue wounds accompanied by sepsis and swelling). The type of splint used was sectional with precision locks and connectors. Intermaxillary fixation was obtained with wire or connecting bars. Any open bite caused by the splint was found to be self correcting in two or three weeks. The construction of acrylic splints offered no saving in time and the fixation left much to be desired.

The plaster of paris headcap provided a simple method of extraoral fixation. The mandible or superior maxilla may be attached to it by means of rods and universal joints, so that a solid base is obtained to which the opposing jaw may be reduced.

The Gunning splint was used in edentulous cases in conjunction with intermaxillary fixation and extraoral support from a headcap and elastic bandage. Badly displaced fragments required interosseous or circumferential wiring.

The Roger Anderson type splint was the last choice for immobilization. It was used successfully to control dis-

placed and isolated bone fragments where other methods were not advisable or were impossible to use. It was found to be insufficiently secure in itself and had to be accompanied by intermaxillary fixation. Only one case of bone infection about the pins was encountered; otherwise the pins remained secure for the required period.

The length of time that fixation must remain in place was an unknown factor which only clinical judgment could hazard a guess. Radiological evidence of callus formation was not evident for at least two months. Therefore, the test for union must be clinical, carefully testing the fracture line for solidity. The simple linear fracture without complications may heal in three to four weeks whereas a fracture with much bone destruction or complicated by infection will require many months.

COMPLICATIONS

Delayed union was encountered in cases where chronic suppuration was present. Sulphathiazole therapy, adequate drainage and firm immobilization eventually led to union in most cases.

Non-union was a result, when a fibrous tissue attachment was established in cases of great bone loss, suppuration of long standing or systemic disease. Radiological evidence of eburnation of the bone ends was conclusive.

Malocclusion encountered was usually a "bite of comfort" developed by the patient. Spot grinding of the teeth was an aid but the education and co-operation of the patient in correct closure was essential. Lateral shift of the mandible to the injured side in fractures of the condyle frequently occurred and had to be corrected by means of a splint with training flange. Limitation of mandibular movements as a result of gunshot wounds was common. Adhesions of the soft tissue required to be broken down by means of jaw exercises and the use of wooden wedges.

NURSING CARE

Post-operative care was of the greatest importance in promoting general health and a speedy recovery. Trained nurses and orderlies were required for feeding, oral and general care of the patient. Many cases were complicated by other body injuries, malaria, dysentery, infective hepatitis and pyrexias of unknown origin. The patient's welfare medically, surgically and dentally pre-

sented a complex problem.

Diet for the first few days was necessarily fluids of a highly concentrated food value. As soon as possible the patient was encouraged to partake of a regular diet in purée form plus extra foods of a high vitamin and caloric content. Training the patient to eat was most readily done by others who had mastered the technique. In this manner was the body weight and general well being of the patient retained.

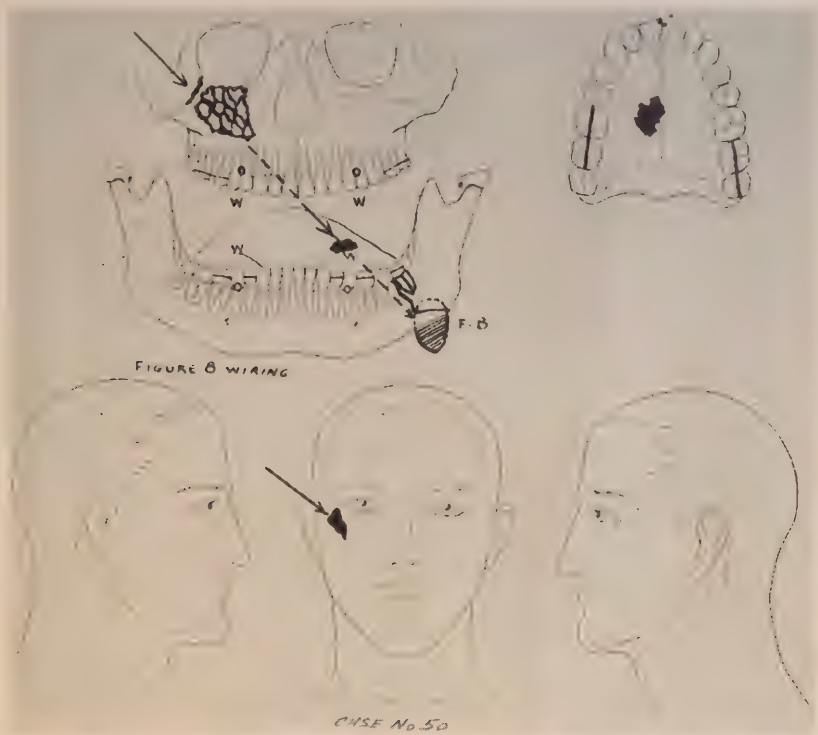


FIG. 1

CASE No. 50

Diagnosis: Shell wound of the face. Penetrating wound with comminuted fracture of the maxilla and linear fracture of the mandible.

Treatment: The infraorbital margin was moulded to place, the antrum packed with vaseline gauze and an intranasal antrostomy performed. The mandible was reduced and fixed with interdental and intermaxillary wires. The removal of L.L. 8 roots seemed an unwarranted and difficult operation in the primary stage. Clinical union was present in fifty-three days.

A mouthwash was always available to the patient and pressure oral irrigations were given after each meal. Mouth comfort was soon appreciated and the patient learned to care for himself.

SUMMARY OF CASES TREATED

Total Number of Cases	174 Cases
(98 G. S. W.; 48 Accidents; 28 S. T. W. only)	
Fractures of Mandible	108 "
Fractures of Maxilla	30 "
Fractures of Malar Bone ...	11 "

Fractures of Zygomatic

Arch	3 Cases
Surgery of Soft Tissue Wounds without Bone Injury	28 "

METHODS OF TREATMENT

Interdental Eyelet Wiring ..	46 Cases
Cast Metal Splints	42 "
Gunning Splints	5 "
Roger Anderson Type	6 "
Interosseous Wiring	1 "

The average lapse of time from injury to immobilization was three days.

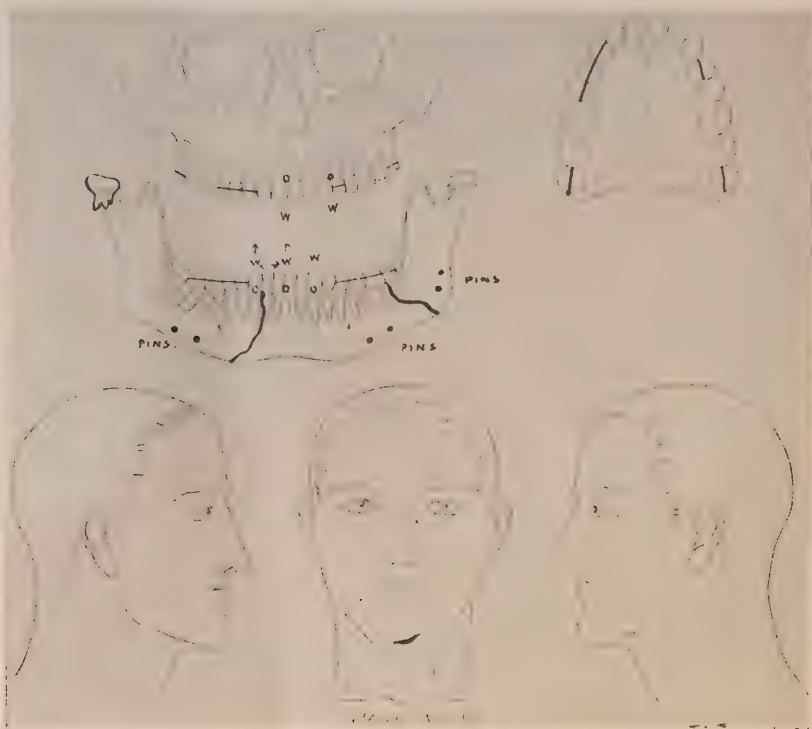


FIG. 2

CASE No. 90

Diagnosis: Compound, bilateral fracture of the mandible. Fracture with displacement of the right condyle.

Treatment: Intermaxillary wiring alone was not sufficient in this case so that the Roger Anderson pin splint was used for more complete security. Clinical union was present in forty-three days.

This delay was occasioned at certain periods by difficulties in evacuation, time required for resuscitation, treatment, and consideration for the patient's surgical risk.

CASE HISTORIES

Due to factors beyond control the case histories must be greatly abbreviated. However, it is hoped that

the photographs of models and diagrams will make the various methods of fixation more readily understood.

To Lt.-Col. E. Janes, (O. C. Surgery) and Major P. E. Ireland, (E. N. T. Surgeon), who performed the meticulous surgery and whose appreciation of the dental problems was ever constant, credit is respectfully acknowledged.

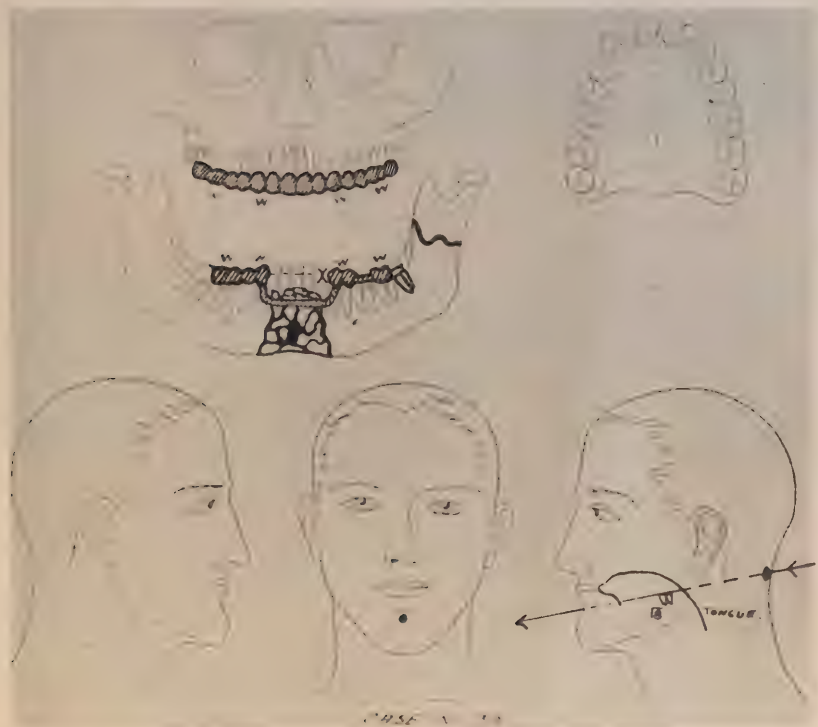
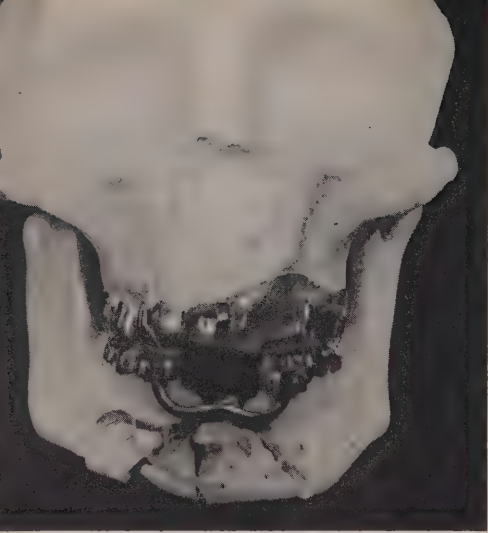


FIG. 3

CASE No. 39

Diagnosis: Gunshot wound penetrating the neck. Compound, comminuted fracture of the mandibular symphysis. Horizontal linear fracture of the ascending ramus.

Treatment: Base of the tongue was sutured to the anterior pillar attachment. The incisor area was debrided and the floor of the mouth sutured to the labial sulcus. Reduction and fixation of the bony injuries was by means of cast metal splints. Clinical union was present in fifty-four days.

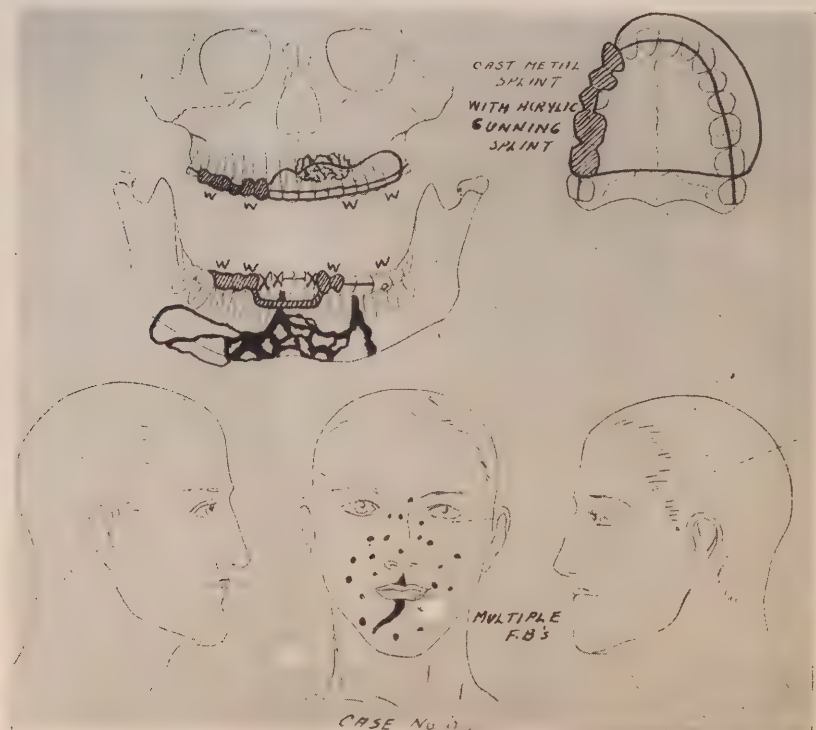


CASE No. 9 FIGS. 4 and 5

Diagnosis: Shell wound (H.E.) Compound, comminuted fracture of the mandibular symphysis. Fracture of the left maxillary alveolus.

Treatment: This patient travelled by train for four days in North Africa with little treatment. On arrival at the hospital, infection was a serious complication. Primary intermaxillary wiring was done. Later, fixation was secured by means of cast metal splints. After fifty days he was returned to base for further treatment. Clinical union was not present. This is a case of delayed union with a good possibility of non-union occurring.

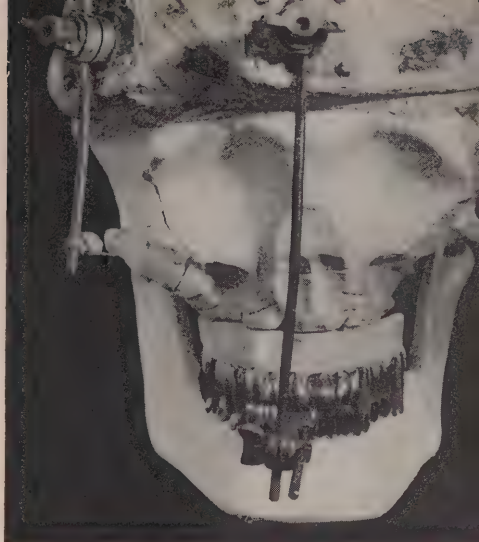
FIGS. 4 and 5



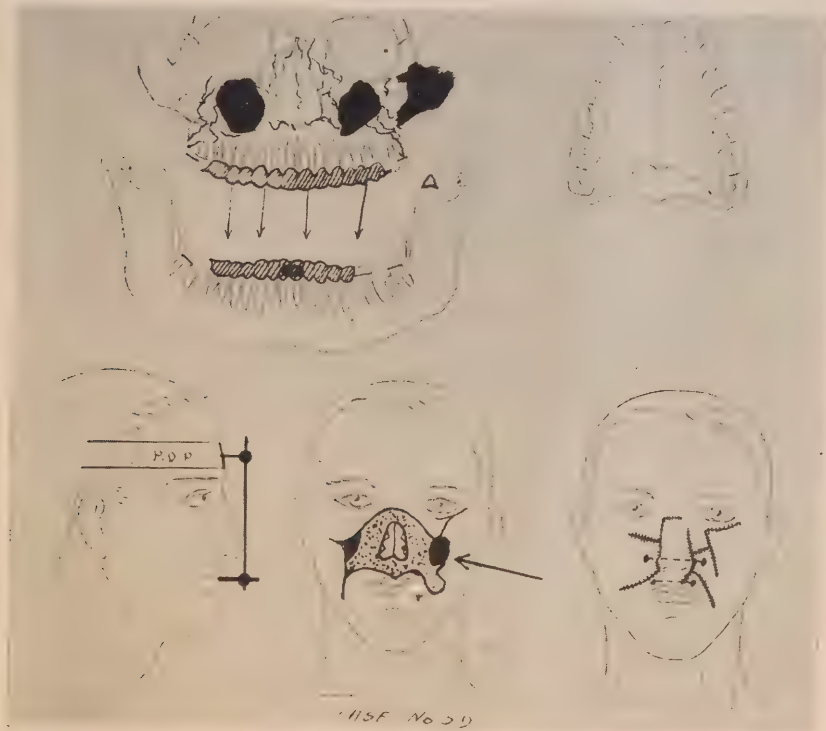
CASE No. 30 FIGS. 8 and 9

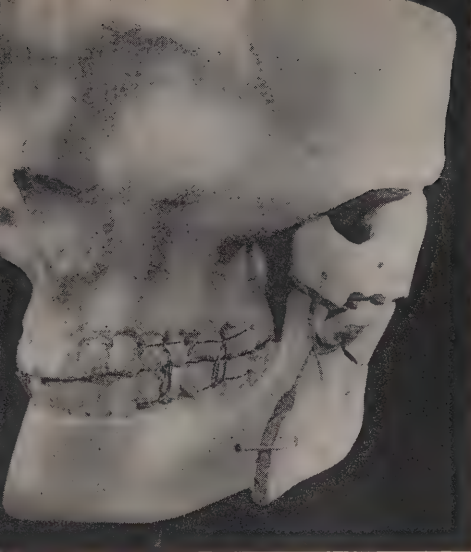
Diagnosis: Shell wound (H.E.) Laceration of the face with tissue loss. Multiple, comminuted, compound fractures of the maxilla with bone loss. Fracture of the left coronoid process.

Treatment: Debridement of the wounds, tags of soft tissue adapted to place. Primary intermaxillary wiring. The maxilla was impacted so that cast metal splints were inserted with elastic traction to bring it down into place. After twenty-seven days the patient's condition was satisfactory and he was therefore evacuated for long term plastic treatment.



FIGS. 6 and 7



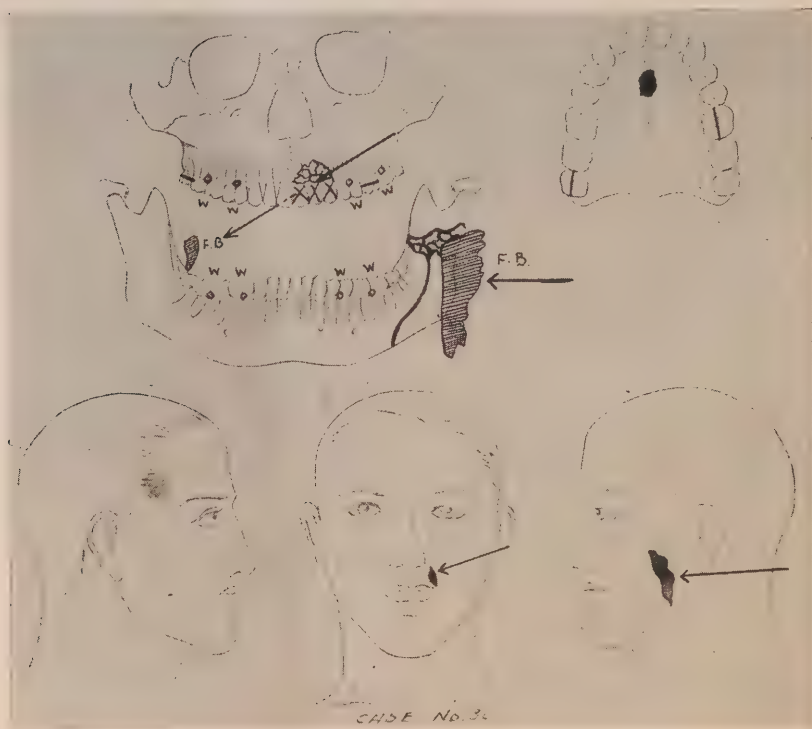


CASE No. 30 FIGS 8 and 9

Diagnosis: Shell wound (H. E.) Compound, comminuted fracture of the ascending ramus of the mandible. Penetrating wound and fracture of the maxillary alveolus.

Treatment: Interdental and intermaxillary wiring readily reduced and fixed the bony injuries. Clinical union was present in sixty-five days and the patient returned to duty in seventy-eight days.

FIGS. 8 and 9



CASE No. 69 FIGS. 10 and 11

Diagnosis: Compound, comminuted fracture of the mandible with bone loss. Marked lacerations of the face with loss of tissue.

Treatment: Multiple body injuries with associated shock delayed treatment of the facial injuries for nine days. Debridement and soft tissue surgery was done, and reduction and fixation of the bony injuries secured with a Roger Anderson pin splint. Clinical union was present in fifty-four days.



FIGS. 10 and 11

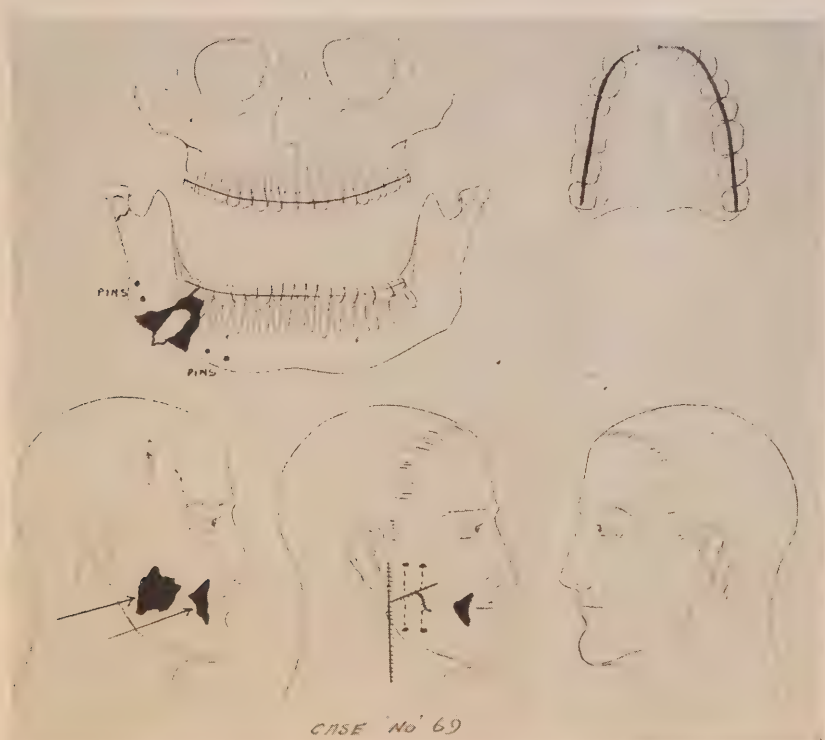




FIG. 12

After removal of intermaxillary fixation in cases of fracture of the mandibular condyle, a lateral shift of the mandible to the injured side is frequently encountered. This case illustrates the insertion of a cast metal splint with training flange on the opposing side to prevent lateral shift of the mandible. Retention of this appliance is required until the muscles accommodate themselves to a new mandibular joint.

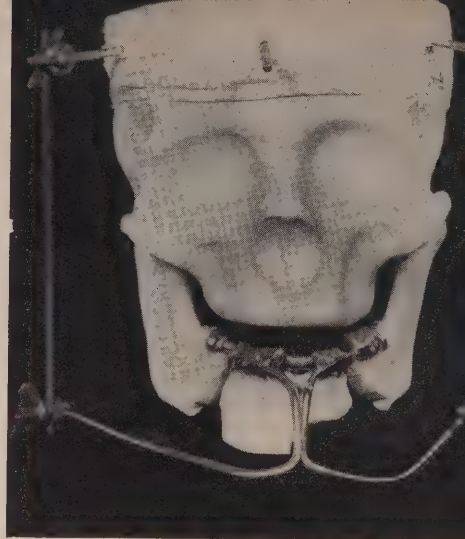


FIG. 13

This case demonstrates extraoral fixation of a through and through gunshot wound fracture of the mandible. A cast metal splint covers the lower teeth with rod extensions to a plaster of Paris headcap. An upper Gunning splint would have offered further security.

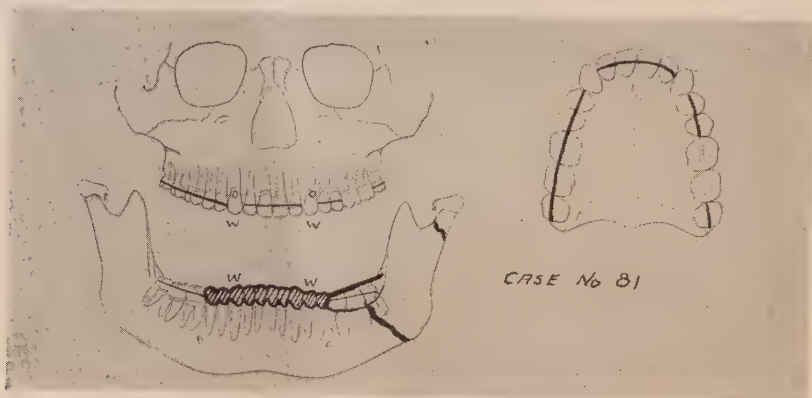


FIG. 14



FIG. 15



FIG. 16

CASE No. 81 FIGS. 14, 15 and 16.

Diagnosis: Fracture of the left mandibular condyle and left mandibular angle (horizontal unfavorable).

Treatment: This case demonstrates one method of controlling the edentulous fragment in the horizontal unfavorable fracture line type. A cast metal splint was cemented in place. A pin projection attached to a lock plate was inserted into the retromolar triangle and engaged in the bone. Intermaxillary fixation was also used. Clinical union was present in twenty-five days.

SUMMARY

1. Cooperation between medical and dental personnel with an appreciation of each other's problems, were the prime requisites to the successful treatment of maxillofacial injuries.
2. The early reduction and immobilization of bone injuries was sought in accordance with the patient's "surgical risk".

3. The conservation of soft and bone tissue was an axiom.

4. Methods of immobilization were simple and secure with a minimum of postoperative requirements.

BIBLIOGRAPHY

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2. Fry, W. K.; Shepherd, P. R.; McLeod, A. C.; Parfitt, G. J. The Dental Treatment of Maxillofacial Injuries. Oxford: Blackwell Scientific Publications.

What is not in a man cannot come out of him surely. —Goethe.

"The truly successful dentists are not the salesmen but the doers. Fees for dentures should be made clear beforehand so that misunderstanding may be avoided. Tell the patient the complete cost and include enough to take care of all exigencies, even to a possible make over. No one can serve every patient who presents himself so don't be afraid to stick to your guns."—Carl Flagstad in F. Review of Chi. D. Soc.—

A TECHNIQUE FOR INVESTING WAX PATTERNS BY VACUUM

by W. J. ROSS D.D.S., Kitchener, Ontario

Investing wax patterns by vacuum, produces castings, which are as near a duplicate of the pattern as it is possible to make. Even the finest lines in the wax pattern will always be reproduced. The method is very simple; in fact, it is much more easily done than by the brush or vibration methods in common use.

NECESSARY EQUIPMENT

1. A vacuum producing device capable of making cold water appear to boil in about ten seconds. In communities having a high water pressure, a simple inexpensive device operated in a manner similar to a saliva ejector will produce sufficient vacuum if a small tumbler is used as a bell-jar. If the water pressure is insufficient, a motor driven vacuum pump will have to be used. All vacuum pumps are not capable of producing the required amount of vacuum. A simple method of checking them is with a small dish of cold water as mentioned above.

2. A vibrating device operated either by hand or by a motor. Hand vibration may be produced by striking the top of the bell-jar with the fist while the floor of the vacuum chamber is raised slightly off the bench with the other hand.

3. A device for measuring accurately the amount of powder and water. The proper proportions are printed by the manufacturer on each can of investment.

4. A mechanical spatulator should be used to ensure the same consistency of mix each time. Fifty to sixty turns of the handle should be used.

5. A three-inch piece of a small sized bicycle inner tube or the same length of air chamber metal and an elastic band. (Either of the above is used to

place over the inlay ring to prevent the investment from flowing out of the ring. Investment material will become at least double its original volume in a vacuum.)

TECHNIQUE OF INVESTING THE PATTERN

The principle used is to remove the air by vacuum from the mixed investment. When the vacuum is released the atmospheric pressure forces the bubble-free investment against every part of the wax pattern.

The wax pattern is sprued and placed on the sprue former. It should be washed and dried. Do not use debubblizer as this makes a weak investment. On a large casting or a casting where it is impossible or undesirable to have all the pattern ahead of the sprue an air vent is provided. This is done by attaching a piece of 18 gauge Kerr's round wax form to the pattern and to a point close to the outer edge of the sprue former. The gold is thus prevented from entering the vent. Air vents should be attached to the pattern near the point where the sprue is attached because it is in this area that the air in the mould is displaced last. (Figs. 1 and 2)

The ring is lined with moistened sheet-asbestos and the piece of tubing or air chamber metal is placed around the inlay ring. The ring is then securely attached to the sprue former with Kerr's utility wax. The reason for this step is to prevent the vibrator from loosening the ring from the sprue former. If a rubber sprue former is used this step is unnecessary.

The investment and water are weighed and placed in the plaster bowl. A hand spatula is first used to start the mix, followed by about fifty turns with a mechanical spatulator.

The mixed investment is poured into the ring and placed in the bell-jar. A vacuum is produced and the bell-jar is vibrated. Air is then allowed to enter the bell-jar and it is again vibrated.

The ring is taken from the bell-jar and placed in a water bath at about 98°. There is little difference between the temperature of a wax pattern taken directly from a cavity in the mouth and one taken from a model held between the fingers. Both will be found to be about 95° or 96°. Maximum setting expansion will be obtained by permitting the water to come in contact with the investment at the open end of the ring. The ring should be left in the water about twenty minutes.

When an investment requiring a low burn-out temperature is used, the wax should be eliminated before placing the ring in the burn-out oven. Do this by heating the ring in a jar of chloroform in a water bath to 130°. The elimination will be accomplished in approximately twenty minutes. Another method is to use a rubber bulb to draw water that has been heated to boiling up through the investment from the bottom of the ring. The hot water coming through the investment will completely eliminate the wax in about five minutes. An appliance to remove the wax by the second method may be made easily from a rubber suc-

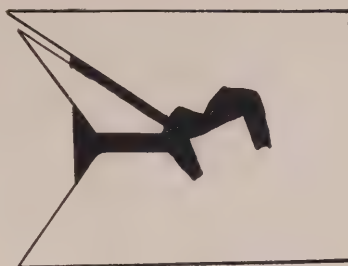


FIG. 1

Air Vent on a large casting

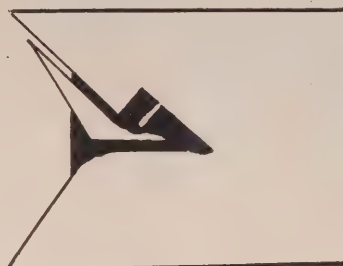


FIG. 2

Air Vent on a pontic casting where the flow of gold would break off the slender investment pins if permitted to flow directly against them.

tion cup, a test tube, and a heavy rubber bulb.

ANNOUNCEMENTS

Dominion Dental Council Examination

Dominion Dental Council examinations will be written July 15 to 20, 1946. Class A fees should be in the Secretary's office not later than May 20, and Class D, not later than April 20, 1946. A. J. Brett, Regina, Sask., Sec. Treas.

Dominion Dental Council

This Council will meet on May 25 and 26 at the Royal York Hotel, Toronto, Ontario.
—A. J. BRETT, Sec.-Treas.

ANNOUNCEMENTS

One-Week Post-Graduate Courses in Periodontology Faculty of Dentistry, University of Toronto

Paralleling dental caries as the principal and most destructive dental disease, are the abnormal conditions occurring in the tissues surrounding the roots of teeth together with the various disorders found in the supporting tissues. To these two main dental diseases may be attributed, in almost equal proportions, the necessity for the extraction of teeth.

Until full knowledge of the causative factors involved in the disturbances of the periodontium is made available through dental research, recourse must, of necessity be made to the use of those remedial measures which have proven to be most successful in practice.

To this end, and in compliance with the requests of the profession, the Faculty of Dentistry, University of Toronto, announce the introduction of three short post-graduate courses in Periodontology, as follows:

1. June 24 to June 29, 1946
2. September 9 to September 14, 1946
3. December 9 to December 14, 1946

As the June 24 class is now being organized, those who wish to attend this initial session are requested to make application for enrolment as soon as possible.

Instruction will be given by the staff in Periodontology, including Doctors H. K. Box, C. H. M. Williams, H. N. Robb and W. G. McIntosh.

The course will consist of lectures and demonstration-clinics. Diagnosis and treatment planning will also be given special consideration. In addition to an exposition of the more recently approved methods of treatment, attention will be given to the relation of local and general metabolic factors involved in the control of periodontal diseases as well as the related therapeutics.

In order that the maximum benefit may accrue to those taking this instruction, the enrolment in each group will be limited to ten.

The fee of \$75.00 is payable at time of application.

For further particulars an inquiry should be addressed to the Dean, Faculty of Dentistry, University of Toronto, 230 College Street, Toronto.

B.C. Dental Association

The annual convention of the British Columbia Dental Association will be held in the Hotel Vancouver, Vancouver, B.C. on May 11.

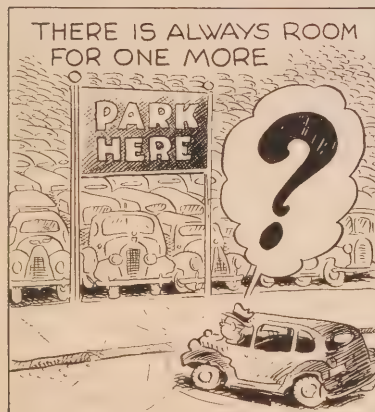
Dr. D. J. Sutherland, Program Chairman, will soon announce the names of lecturers and clinicians.

The annual business meeting of the association will be held at 5.00 P.M. the same day.

On May 12, the Vancouver Dental Society and the British Columbia Dental Association will hold a joint golf game.

Convention of New Brunswick Dental Association.

The 51st Annual Convention of the New Brunswick Dental Society will be held at the Admiral Beatty Hotel Saint John, N.B., September 16 and 17— Dr. S. K. Wetmore, Sec., 147 Germain St., Saint John, N.B.



NATIONAL CONVENTION OF CANADIAN DENTISTS**PROGRAM*****Monday, May 27th***

- 8.00 A.M.— Registration. Secure your official program and badge, tickets for Luncheons, Hart House Reception, President's Reception and Dance; also Fellowship Luncheon Tickets. Register for Golf Tournament.
- 8.00 A.M.— Dental Public Health Council Breakfast.
- 9.30-11.45 A.M.— Exhibitors Table Demonstrations in the Ball Room.
- 12.15 Noon— Luncheon and Opening Ceremonies.
- 2.15 P.M.— General Session — Ball Room.
Paper—"Research on Dental Caries and Its Application to Dental Practice".
STANLEY J. BAGNALL, D.D.S., Dalhousie University, Halifax.
- 2.55 P.M.— Paper—"Recent Advances in the Knowledge of Cancer With Special Reference to Cancer of the Mouth".
WILLIAM BOYD, M.D., F.R.C.P. (Lond.), Toronto.
- 3.35 P.M.— Paper—"Diseases and Conditions Seen in the Mouth".
C. H. M. WILLIAMS, D.D.S., B.Sc. (Dent.), Toronto.
- 4.10 P.M.— Canadian Dental Association Meeting.
- 5.00 P.M.— Dental Legal Protective Association Meeting.
- 6.30 P.M.— Class Reunions.
- 7.30-10.00 P.M.— Commercial Exhibits.

Tuesday, May 28th

- 9.00-11.30 A.M.— Group Clinics. (See Group Clinics List).
Luncheon—No formal Luncheon Arrangements.
- 2.00-4.30 P.M.— Individual Table Clinics—Concert Hall.
- 8.00 P.M.— Hart House Homecoming Reception. Buffet Supper and Entertainment for delegates and their ladies.

Wednesday, May 29th

- 9.00-11.30 A.M.— Group Clinics. (See Group Clinics List).
- 12.15 P.M. Sharp — Luncheon.
Speaker—HON. BROOKE CLAXTON, Minister of National Health and Welfare, Ottawa.
- 2.30 P.M.— General Session.
Paper—"Heart Disease and Its Relation to Dental Practice".
WALLACE GRAHAM, D.D.S., M.D., M.R.C.P. (Lond.), Toronto.
- 3.10 P.M.— Paper—"Oral Plastic Surgery".
STUART D. GORDON, M.B., F.R.C.S., (C) M.S., (T) F.A.C.S., Toronto.
- 3.50 P.M.— Paper—"New Aspect on Periodontal Research".
HAROLD K. BOX, D.D.S., Ph. D., F.A.C.D., Toronto.
- 4.30 P.M.— Ontario Dental Association Meeting.
- 7.00 P.M.— President's Reception and Dinner Dance. Floor Show.

Thursday, May 30th

- 9.00-11.30 A.M.— Group Clinics. (See Group Clinics List).
- 12.15 P.M.— Fellowship Luncheon for delegates and their ladies

NATIONAL CONVENTION OF CANADIAN DENTISTS

GROUP CLINICS

Group Clinics will be held on Tuesday, Wednesday and Thursday mornings, 9.00-11.30 A.M. No clinic tickets. Select the clinics you wish to see and be there on time. Each clinic will be presented twice.

HOWARD J. MERKELEY, D.D.S., M.D.S., Winnipeg.

"Successful Complete Denture Service".

IRVIN H. ANTE, D.D.S., Toronto.

"The Muco-seal, Mandibular Impression Technique, Stability and Retention in the Lower Denture".

AIME COUTURE, D.D.S., Ottawa.

"True Acrylic Duplication of Anteriors for Immediate Insertion of Complete Denture Following Extraction of Teeth".

R. J. GODFREY, D.D.S., B.Sc. (Dent.), Toronto.

"Scientific Planning of Removable Partial Dentures".

J. FRANK GIFFEN, D.D.S., London.

"Partial Denture Prosthesis, Functional Partial Denture Impressions".

W. J. ROSS, D.D.S., and R. J. HEMMERICK, D.D.S., Kitchener.

"Pin Inlays and Precision Casting of Inlays, Crowns and Bridge Pontics".

NORMA FORD WALKER, M.D., Toronto. "Genetics".

WILLIAM MAGNER, M.D., D.P.H., Toronto.

"Oral Manifestations of Blood Dyscrasias".

G. H. W. LUCAS, M.A. and Ph.D., Associate Professor of Pharmacology, University of Toronto, Toronto.

"Pharmacology of Some Drugs Useful in Dentistry".

H. W. WAKEFIELD, Toronto General Hospital.

"Sulpha Drugs in Dentistry".

M. ARMACOST COX, M.B., Toronto.

"Recent Advances in our Knowledge of Dental Caries and Various Methods Used in Control and Prevention of Caries".

W. C. BUSHELL, D.D.S., Montreal. "Porcelain — Acrylics".

G. D. STIBBS, D.D.S., Vancouver. "Gold Foil".

H. R. MCLEAN, D.D.S., Edmonton. "Gold Inlays".

W. J. LINGHORNE, D.D.S., Toronto.

"The Treatment of the Infection Angle in Periodontal Disease for the General Practitioner".

W. G. MCINTOSH D.D.S., Toronto.

"An Illustrated Presentation of Periodontal Case Management".

C. H. M. WILLIAMS, D.D.S., B.Sc. (Dent.), Toronto.

"Gingival Recession, Its Causes and Treatment".

ROGER MCMAHON, D.D.S., Montreal.

"Practical Clinic on Oral Surgery".

DOUGLAS TANNER, M.B.E., D.D.S., B.Sc. (Dent.), Toronto.

"The Dental Treatment of Maxillo-Facial Injuries".

J. H. JOHNSON, D.D.S., Toronto.

"The Surgical Treatment of the Abnormal Maxillary Frenum".

GEORGE A. MORGAN, D.D.S., Toronto.

"Differential Dental Roentgenography Diagnosis".

JOHN W. CLAY, D.D.S., F.I.C.D., Calgary. "Dental Radiography".

C. D. HUSBAND, D.D.S., Red Deer. "Local Anaesthetic Solution".

F. L. MILLER, D.D.S., Fredericton. "Amalagam".

G. H. CHUDLEIGH, D.D.S., Halifax. "Gold Inlays and Their Cavity Preparations".

W. L. HUGILL, D.D.S., Toronto.

"Silicates—Choice of Silicate, Pulp Preparation, Manipulation and Reasons for Early Failure".

NATIONAL CONVENTION OF CANADIAN DENTISTS

GROUP CLINICS—Continued

STEWART A. MACGREGOR, D.D.S., Toronto. "Interception of Malocclusion".

ROY G. ELLIS, D.D.S., M.Sc. (Dent.), Toronto.

"Recognition of Incipient Disturbances in the Examination of the Mouth of the Child".

J. H. EBBS, M.D., D.C.H. (Eng.), Toronto.

"A Review of Important Nutritional Factors in Dentistry".

MARCEL B. ARCHAMBAULT, B.A., D.D.S., Montreal.

"A Conservative Method of Root Canal Therapy Devised Principally for the Average Practitioner."

LOUIS J. FENECH, D.D.S., Windsor.

"Root Resection of Anterior Teeth As a Practice Builder".

ORTHODONTIC SECTION

One of the features of the convention this year is the special section on Orthodontics. The two-day program of this section is designed to assist the busy general practitioner, as well as the specialist in orthodontics, who wishes to avail himself of the opportunity to further his knowledge in this important branch of dentistry.

On Tuesday, May 28, outstanding orthodontists from across Canada will present a cross-section of current thought upon the various phases of orthodontics of particular interest to the general practitioner.

On Wednesday, May 29, the Staff of the Orthodontic Department, Faculty of Dentistry, U. of T. will present a symposium which will constitute a condensed refresher course for the general practitioner in the interception of malocclusion and the treatment of incipient dental irregularities.

Because of the increase in the incidence of malocclusions, dental practitioners to-day are consulted more frequently than ever by conscientious parents respecting the status of the occlusion in the mouths of their young children. Each member of the dental profession should be proficient in differentiating between transitory aberrations of growth and incipient stages of dentofacial abnormalities which may manifest themselves and which may become intensified if neglected.

An excellent opportunity for the dentist who wishes to become more proficient in this important phase of practice is provided at the convention of this year. A special section on orthodontics has been organized which has made it possible for the first time to bring together on the same program outstanding Canadian orthodontists who will present a cross section of current thought upon the various phases of orthodontics of particular interest to the general practitioner. The two-day program of this section is designed to assist the general practitioner as well as the specialist in orthodontics who wishes to avail himself of the opportunity to further his knowledge in this important branch of dentistry. Altogether, this program is designed to provide a condensed post-graduate course in the interception of malocclusions and the treatment of incipient dental irregularities.

The essayists and clinicians who will participate in the program for the orthodontic section are:

Dean W. W. Woodbury, Halifax; Drs. Maurice L. Donigan, Montreal; R. R. McIntyre, Calgary; Chas. A. Corrigan, M. R. Culbert, G. V. Fisk, Geo. W. Grieve, and H. Halderson, Toronto.

An outline of the complete program for the Section appeared on page 124 of the March issue of the *Journal of the Canadian Dental Association* and is not repeated in this issue. A perusal of this program outline will convince you that the meeting of this Section is one which you cannot afford to miss. **PLAN NOW TO ATTEND.** You will be very welcome and there is no further registration fee.

STUART S. CROUCH, Chairman

NATIONAL CONVENTION OF CANADIAN DENTISTS

A Note to the Ladies

Although housing will again this year be a serious problem, the Convention Committee has expressed the hope that as many wives as possible will accompany their husbands to the Convention. It is my privilege on behalf of the Ladies' Committee to assure you that an interesting program is arranged and a hearty welcome awaits you. The reception by His Honour, the Lieutenant Governor and Mrs. Matthews on Monday, the Home-coming Party at Hart House Tuesday, the President's reception and dinner dance, Wednesday (dress informal) and the fellowship luncheon, Thursday, are events which have been planned for your enjoyment.

May we have the pleasure of greeting you!

MRS. HARVEY REID
(on behalf of the Ladies' Committee)

HOUSING ANNOUNCEMENT

Your Housing Committee still has its problems but every effort is being made to make the visit of every delegate to the Convention as pleasant and comfortable as possible.

You will facilitate the work of the Committee by making sure your application for hotel accommodation is in the Chairman's hands by May 10.

GLENN T. MITTON, Chairman, Housing Committee.

GOLF! GOLF! GOLF!

AT NATIONAL CONVENTION OF CANADIAN DENTISTS

Tournament open to all.

Play on any of three days: Monday, Tuesday or Wednesday.

Register for golf on Monday A.M.

Both Canadian and Ontario Championships at stake.

Plenty of prizes.

Presentations to be made at Grand Finale luncheon on Thursday, to which ladies are invited. You will not want to miss this luncheon.

CHANGE OF ADDRESS

Notice of change of address should reach the Secretary's office before the first of the month in which the change is to take effect. Please furnish old as well as new address.

Members in the Military Services are requested to notify respecting change of address as quickly as possible so that the *Journal* will be received at new address.

In all cases, the former address should be given.

Address all communications to:

The Secretary,
Canadian Dental Association, 211 Huron Street, Toronto 5.

The Forum

NATIONAL HEALTH DISCIPLINE

The Mental Hygiene of Digestion and Prevention of Peptic Ulcer

by J. P. S. CATHCART, M.B., Chief Neuropsychiatrist,

(Department of Pensions and National Health)

Condensed from the National Health Review.

Most people are themselves to blame for digestive troubles—often it is merely what they eat, and when; but perhaps more often it is the way they eat, particularly in relation to psychological environment at meal time. Everybody knows that meals should not be taken in haste and that food should be well masticated, but it is a peculiarity of the individual who suffers from common digestive disorders that he is largely unaware of his mistakes in hygiene. Actually, it is a particular type of individual who suffers from peptic ulcer or a pre-ulcerous state—usually he is one who gets his digestion tangled up with his drive, or vice versa. He is what you might say in horse language always “riding on the bit.” Often he attempts to project the fault by claiming that he is too busy or is carrying too much responsibility, but these people set their own pace—not only at work but also at meal time.

In close association with the tempo of eating, there is the matter of mastication. If the meal is speeded up, mastication is imperfect or altogether neglected. Often there is a more obvious situation—insufficient teeth with poor occlusion, badly-fitting dentures or teeth that because of abscess or pyorrhea are tender on the bite. This, in combination with hasty eating, will almost inevitably bring on digestive difficulties. One such common difficulty is frequently referred to as “gas

on the stomach.” In that association, gas is not produced in the stomach; in fact “gas on the stomach” is nothing but swallowed air, usually gulped down with food or drink.

We are beginning to appreciate that the psychological aspect of digestion is of most importance. The dinner table is no place for jangling, nor should it be used as a sounding board for the discussion of family problems: an indigestible mother-in-law at the same table can be a more potent factor in digestive trouble than badly cooked meals hastily eaten. We are learning, too, that it is a mistake to have the radio going at meal time with its new flashes and broadcasts and associated tension production. Shop talk at meals should be omitted.

One writer carried that idea further and, looking back over his lifetime of digestive difficulties, associated with peptic ulcer, concluded that every time he had been preoccupied during meal time with planning what he must do the moment he finished his meal, he had trouble afterwards. He was positive that this simple circumstance was the common denominator of the great majority of his post-meal upsets.

Someone has recently recommended the universal return to the old custom of grace before meals, and there is much to recommend it apart from religious observance. So many similar

religious customs have within them the wisdom of the ages, and their high psychological purpose should not be overlooked.

Recent experiments have confirmed the previous impression that worry directly influences digestion by producing hyperacidity. Fear attitudes of all sorts affect digestion. The chronic dyspeptic has fear of eating certain foods. Special or restricted diets are necessary at certain periods, but fearful attention to dietary restrictions is harmful and often prolongs the illness through the operation of the vicious circle principle. Many people so involved discover to their puzzlement that on a fishing or hunting expedition, or a release from responsibility, they can eat and drink almost anything.

PENICILLIN LOZENGES

In treatment of Oral Lesions

by ROY B. WRIGHT, D.D.S., and ROBERT W. RULE, Jr., D.D.S., San Francisco.

Condensed from the Jour. of the Cal. State D. Assoc.

A total of 151 patients with periodontal lesions were treated with penicillin sodium lozenges. Of this group, 9 per cent were sensitive, developing mild toxic manifestations.

There were thirty-eight patients treated with penicillin calcium lozenges, 16 per cent of whom developed severe toxic reactions.

Although the beneficial results obtained from the use of lozenges containing sodium salts and those containing calcium salts of penicillin are equally satisfactory, we have considered it advisable to limit the number of cases treated with lozenges containing penicillin calcium as now compounded, due to the severity, frequency, and duration of toxic reactions resulting from their use.

Reactions experienced by sensitive patients to the use of penicillin calcium lozenges follow a definite pattern, characterized by the following symptoms: Sore throat and tongue, extreme dryness with burning sensation throughout the mouth (more pronounced on the lips), impaired taste,

In the near future, it is very likely that our National Effort will be speeded up considerably, and in such a way as to affect each and every one of us. Already many have voluntarily accepted discipline as a personal goal, and others will soon follow this lead. In doing so, we should see to it that, no matter how long may be our hours of work, or how great our real anxieties, we follow a rule of having regular meals, arranging sufficient time and the proper circumstances to enjoy them—a fifteen-minute knockoff from work for a hastily-eaten lunch is a losing arrangement for employer and employee alike. The attainment of health and fitness, individual or collective, should be the patriotic duty of every Canadian.

sensitivity to hot food and drink, salty or spiced foods. The tongue and oral mucosa is usually a very dark red. Three cases of stomatitis were featured by transitory exfoliative lesions.

Following discontinuance of the therapy patients experienced increased discomfort for approximately two days, after which there was a very slow improvement. The distressing phase usually lasted from one to two weeks.

A mild glossitis sometimes persisted for several weeks, associated with varying degrees of taste impairment and hypersensitivity, remaining longest at the tip of the tongue.

The sense of dryness usually continued for weeks, being more protracted on the lips.

The above pattern did not alter although the penicillin calcium lozenges employed were obtained from three different sources and compounded according to separate formulas.

Reactions to penicillin sodium lozenges have been comparatively mild

and show little variance from the previous report.

CONCLUSIONS

The incidence of toxic reactions to the use of penicillin sodium lozenges does not preclude their use, except that caution should be exercised with known sensitive individuals.

On the basis of our continued investigations in the larger series of cases treated, there is a preponderance of evidence to indicate that penicillin is a superior therapeutic agent when employed in the treatment of acute oral infections and that the lozenge is a highly satisfactory dosage form for its administration.

SILICATE CEMENTS

by FRED WERTHEIMER, D.D.S.

Conclusion of paper in Jour. of D. for Children, 4th Quarter, 1945

DESPITE the fact that silicate cements fail woefully in meeting most of the desirable qualities of a filling material, there is no possibility of the dental profession discarding them. Their ability to match tooth structure, plus their convenience of manipulation, will keep them popular until such time as better material is found to take their place. Therefore, a summary appears to be in order of the several factors necessary to get the best service from a deficient material and prevent immediate failure of restorations made from it.

A. Recognition of Limitations of Silicate Cements:

1. They should not be used in the mouths of people with a deficient amount of saliva; in the teeth of mouth breathers; or under gingival margins.

2. They should not be used distal to the cuspids, nor in cavities which involve the incisal angle.

B. Preparation of Cavities:

1. Cavities should not have bevels, nor sharp angles.

2. Cavities should be well sterilized, and over-dehydration avoided.

3. Floors and walls of all cavities should be varnished and, in deep cavities, the pulp should be protected with a suitable base.

C. Material and Manipulation:

1. Use a material guaranteed by a

reliable manufacturer to meet A.D.A. Specification No. 9.

2. Follow the directions which accompany this material.

3. Do not use ordinary steel, german silver or aluminum instruments.

4. Cool the mixing slab to about 70 degrees but avoid cooling to the point where condensation occurs on the slab.

5. Proportion the powder and liquid accurately.

6. Do not use any liquid that shows a trace of cloudiness or sediment.

- (a) Put the first drop of liquid back into bottle.

- (b) Hold the circular end of the dropper parallel to the surface of the slab.

7. Do not mix over one minute, but be sure to completely wet the mass.

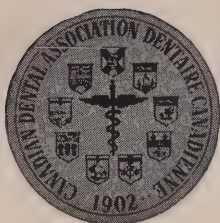
8. Get the thickest mix possible without interfering with suitable adaptation.

9. Insert the mix into the cavity promptly, keeping the cavity dry during the insertion.

10. Wedge the matrix at the cervical and hold it still 3 to 5 minutes.

11. Remove the matrix and cover the filling with varnish to protect against dehydration.

12. Do no finishing not absolutely necessary until a subsequent appointment, and use cocoa butter as a lubricant while finishing.



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Editorial

OUR NATIONAL CONVENTION

by **T. R. MARSHALL, Toronto, Ontario**

"The great thing in the world is not so much where we stand, but in what direction we are going."—Oliver Wendell Holmes.

The story is told of a coloured boy who dropped into the corner grocery store one day and asked if he might use the telephone. The shop keeper, knowing the lad by sight, replied, "Certainly, just around that corner." While he busied himself about his work he overheard this one-sided conversation—"Is that you Mrs. Jones? I understand you want a boy to cut your grass and do odd jobs about the house? Oh! you don't—you have a boy—is he a good boy?—he does his work satisfactorily?—Oh well if you don't need a boy it's alright thanks Mrs. Jones," and the boy hung up. As he was passing out of the store the shop keeper could not refrain from asking the lad if he would like a job. The lad replied, "Oh, no thank you sir, you see I'm the boy who works for Mrs. Jones and I was just checking up on myself."

Checking up on ourselves at intervals is a good thing. Indeed it is an excellent habit to acquire. All successful business firms take an annual inventory to check upon what is going on. I wonder how often the dentist takes time out to stand back and take a look at his practice in perspective.

During the past five years of war many dentists have been away from their practices and perhaps see things differently than when they joined His

Majesty's service. Other young men who have never practised privately, have served His Majesty's forces and have developed their own concept of dental care. Others again who remained at home to serve the civilian population have had little opportunity to look up to see whither their practices were leading them. Then too, this great country of Canada, nearly 4000 miles in breadth, has sort of loosely divided itself into a number of sections due to economic and environmental interests, each possessing slightly varying points of view on national problems. All of these conditions seem to present a fine background for a get-together — A National Convention of Canadian Dentists.

The meeting place is Toronto, midway between the East and the Great West, in the beautiful month of May. What could be more opportune and inviting? To many graduates from the University of Toronto it will be a "Home Coming" to renew many happy friendships and treasured memories; and to other Canadian dentists the convention will afford an opportunity to come to Toronto, see at first hand the dental educational facilities here and enjoy the inspiration and benefits of this the greatest dental meeting of all time in Canada.

It has been publicized again and again recently that this convention is being held under the joint auspices of the Canadian Dental Association and the Ontario Dental Association. The Board of Governors of the Ontario Dental Association have agreed to merge their usual annual meeting into an all-inclusive National Convention of Canadian Dentists. Dr. Harvey W. Reid and Dr. Frank Martin, respective presidents of these associations have, associated with them, a corps of enthusiastic, hard-working colleagues constituting a "General Convention Committee" with Dr. P. G. Anderson as chairman. This committee, besides directing general program arrangements, supervise and delegate duties to a great number of sub-committees about whose duties and achievements much could be written.

Program arrangements have been pretty well completed for some time. Many changes in presentation are planned as evidenced by a preliminary report published in the recent March issue of this Journal. A feature worth noting is the personnel appearing to give papers, lectures, clinics and addresses. Every section of Canada is represented, and by men recognized as leaders in their own district. Further, the program is so varied in set-up that every interest of the Canadian dentist has been given consideration so that there will be a discussion of a wide range of problems in the various phases of dental science and dental practice.

While the academic presentations are the backbone of any dental program, yet in this instance plans are well in hand covering a wide range of attractions. There will be more and better commercial exhibits than ever assembled before at a Canadian meeting. There is time allotted for meetings and fraternizing with old friends in class parties and so forth. Arrangements are being made for social functions, including the ladies; indeed a program for ladies too is being planned; speakers of national reputation and de-

lightful entertainment are being featured at the luncheons. And of course, arrangements are completed for golf for all who wish to play and who bring their clubs.

It can be repeated that the convention committee are working very hard to make this meeting something to remember. There is, however, one problem in which every dentist planning to attend can give assistance. Hotel accommodations are at a great premium. Anyone who can make private arrangements for accommodation should do so, otherwise Dr. Glenn Mitton, of 86 Bloor St. West, is chairman of the housing committee and all hotel reservations should be made through him. The hotels have allotted a limited number of rooms and these must be allocated in such a way as to look after the comfort and convenience of all with the greatest economy. Dentists are therefore asked not to delay writing at once, if they have not already done so, enclosing convention registration fee and making request for hotel reservations.

Finally, it is not entirely the group of men in charge of arrangements that make a good convention. They provide the facilities but it is those who attend who really make the meeting worth while. The battles to win the war are over, but the battle to win the peace is with us and it seems very arduous. An inventory of our accomplishments and of our problems can only give inspiration and courage to our leaders and ourselves. A National Convention of Canadian Dentists is a progressive step, conducive to understanding and team work in a great health service.

C.D.A. WAR MEMORIAL FUND

The effort to reach our objective in this important C.D.A. undertaking is gaining momentum as the weeks slip by. On March 15 the following amounts had been received: from Saskatchewan, \$702.00; from Nova Scotia, \$345.00 (\$20.00 over quota); from Ontario, \$1437.50; from the College of Dental Surgeons of British Columbia, \$500.00; making a total of \$2984.50. This amount was made up as follows: cheque from B.C. for \$500.00; 1 subscription of \$100.00; 3 of \$50.00; 26 of \$25.00; 4 of \$20.00; 6 of \$15.00; 93 of \$10.00; 89 of \$5.00; 4 of \$3.00; 1 of \$2.50; 12 of \$2.00; 1 of \$1.00.

The quotas set for each province were based upon the number of dentists in each province. The quota for Saskatchewan was \$350.00 and on March 1 this province had collected over twice its quota with more coming in. Our heartiest congratulations go to the men of this prairie province for their splendid achievement and for setting such a fine example to the rest of us.

A very fine letter received from an Ontario dentist by Dr. Phillips, our representative in that province, reads as follows: "Am enclosing cheque for War Memorial Fund. I give it gladly to honour the lives of those of our profession who gave their lives for us and particularly in memory of my own

son who was killed overseas eighteen months ago today, and my brother's boy in the Dental Corps killed just a month before; both of whom had intended making dentistry their life work.

I hope the fund will be a goodly one."

If you have not sent in your subscription be sure to do so soon and so help to put your province up among the leaders in this noble undertaking.

As we go to press we learn that Alberta has reached its objective of \$425.00 and Dr. McIntyre still expects to hear from a considerable number of dentists in that province.

M.H.G.

CORRESPONDENCE

NEWS FROM SOUTH AFRICA

Condensed from a letter to the Editor from our South African Correspondent.

"I hope to be freer later to tell you more about our profession's war effort. There is no doubt that the Service was of a high standard and was very much appreciated. The effort given will redound to the honour of dentistry for generations to come.

"Reading the dental journals, one is struck by the similarity of problems confronting the dental profession all over the world. I think the outstanding achievement of the past few years here, in South Africa, has been the passing of the 1945 Dental Act whereby dental mechanicians will be prohibited from any contact whatsoever with the public.

"Of course the question of a National Health Service is engaging the attention of the profession, but apart from a probable in-

crease in Institutional Dentistry, it does not seem that a completely nationalized scheme will come for years. We have a black population of 8,000,000. They are very underprivileged and their standard of living is deplorably low. They have no black dentists and practically no African medical or nursing personnel. At present they are looked after by whites. So you see what a burden would be placed on the small white population of 2,000,000 if they had to carry the dead weight of a Health Service embracing 8,000,000 Africans. This, I believe, is the main reason we cannot have a comprehensive National Health Service for years to come, although the population is clamouring for it and the Government is committed to it.

Signed HARRY GOLDIN.

BOOK REVIEWS

Prosthetic Dentistry, A Clinical Outline, by F. Winston Craddock, B.A., Cert. Dent. (N.Z.), Lecturer and Head of the Department of Prosthetic Dentistry, Lecturer in Dental Technology, University of Otago Dental School, New Zealand. 63 illustrations. Published by Henry Kimpton, London. Price 15/ net.

This introduction to Prosthetic Dentistry is of special interest because it is prepared by an outstanding teacher in what is, to us, a far distant part of our Empire. The author expresses the opinion that the time may not be far distant when the instruction of students in prosthetic dentistry will be limited to the bio-

logical and physical principles underlying the science, and to its clinical applications, to diagnosis and to prescription. The book is mainly addressed to students to be read concurrently with the course of lectures, laboratory, and clinical instruction, and the author modestly hopes that in the hands of the dentist it will serve to stimulate further inquiry into the fundamentals underlying his everyday procedures.

Chapters are included on elementary anatomy, examination of the mouth, impressions, casts, centric occlusion and centric relation, articulators, setting up teeth, processing, principles of retention, insertion of full dentures,

partial dentures, aesthetics, and a short chapter on fractures and obturators. In each chapter the author is careful to stress basic principles involved and then briefly to apply them. This feature makes the work most interesting and beneficial to those for whom it is intended.

KENNETH M. JOHNSON

Anatomy of Head and Neck, by R. T. Hill, Ph.D., Associate Professor of Anatomy, Indiana University, Schools of Medicine and Dentistry, Bloomington, Indiana; 30 engravings with 4 in colour; 125 pages. Published by The Macmillans in Canada, St. Martin's House, Toronto. Price \$3.15.

This book is written for the dental student in his freshman course on gross anatomy. During dissection, many structures are partially dissected and then left for complete dissection at a later and more logical stage. A section on osteology precedes the dissection.

Special knowledge of the anatomy of the head is important in dentistry as its application extends into every branch of our profession.

Dr. Hill makes use of all available methods to make his subject interesting and clear to understand, and many dentists would find help and inspiration in perusing the pages of this book.

M.H.G.

DENTAL CORPS NEWS

SUPPLEMENTARY LIST OF CANADIAN DENTAL CORPS OFFICERS

RETIREMENTS

Rank, Name and Date	Civilian Address	Rank, Name and Date	Civilian Address
Major R. W. Hughes, 7-12-45	Timmins, Ont.	Capt. K. F. Mueller, 16-11-45	Hamilton, Ont.
Major H. E. Clark, 17-12-45	Summerside, P.E.I.	Capt. M. G. McCartney, 11-1-46	Lindsay, Ont.
Major W. C. Dowell, 5-12-45	Halifax, N.S.	Capt. D. A. McGillivray, 8-1-46	Fenelon Falls, Ont.
Capt. H. M. Parker, 20-12-45	Sydney, N.S.	Capt. A. W. J. McLellan, 22-12-45	Osgoode, Ont.
Major R. H. Stanford, 9-10-45	Wolfville, N.S.	Capt. L. Parks, 15-12-45	Toronto, Ont.
Capt. R. Bernier, 14-12-45	Verdun, P.Q.	Capt. H. M. Potashin, 15-11-45	Toronto, Ont.
Major H. R. Brown, 14-12-45	Montreal, P.Q.	Major D. M. Rouse, 4-1-46	Bancroft, Ont.
Capt. P. Desjardins, 21-12-45	Montreal, P.Q.	Capt. C. R. Ryan, 14-12-45	Toronto, Ont.
Major R. G. Docks, 9-1-46	Montreal, P.Q.	Lieut. J. D. Scarfone, 22-11-45	Windsor, Ont.
Capt. R. F. Harvey, 6-12-45	Westmount, P.Q.	Capt. R. G. Schwalm, 18-12-45	Barrie, Ont.
Capt. J. V. L. Henault, 8-1-46	Montreal, P.Q.	Capt. D. A. Shain, 8-1-46	Pembroke, Ont.
Major L. T. Hooker, 29-12-45	Montreal, P.Q.	Capt. J. B. Sproule, 30-11-45	Thessalon, Ont.
Lieut. R. A. Lamarche, 7-1-46	Montreal, P.Q.	Major G. W. Sugden, 10-12-45	Cornwall, Ont.
Capt. J. R. A. A. Laurence, 20-12-45	Coaticook, P.Q.	Capt. W. G. Woods, 29-11-45	Mimico, Ont.
Capt. A. Leith, 8-1-46	Outremont, P.Q.	Capt. H. A. Allen, 17-12-45	Winnipeg, Man.
Capt. J. J. Mignault, 14-12-45	Montreal, P.Q.	Major W. A. Belden, 10-12-45	Winnipeg, Man.
Capt. H. L. Mussels, 13-12-45	Montreal, P.Q.	Capt. A. Diner, 18-12-45	Winnipeg, Man.
Capt. H. T. Oliver, 4-1-46	Montreal, P.Q.	Major A. I. Hamilton, 5-10-45	Winnipeg, Man.
Capt. R. Silverstone, 11-12-45	Montreal, P.Q.	Capt. G. H. Merkeley, 19-12-45	St. James, Man.
Major W. A. Sugars, 6-12-45	Chicoutimi, P.Q.	Major J. B. Rumberg, 8-11-45	Winnipeg, Man.
Capt. K. M. Walley, 17-12-45	MacMasterville, P.Q.	Major M. Wachnow, 20-12-45	Winnipeg, Man.
Capt. J. C. Willard, 8-1-46	Shawville, P.Q.	Major J. R. Day, 8-12-45	Rocanville, Sask.
Capt. V. B. Wilson, 8-1-46	Shawinigan Falls, P.Q.	Capt. G. E. Decker, 11-12-45	Lloydminster, Sask.
Capt. I. D. Appleby, 9-1-46	Toronto, Ont.	Capt. C. G. Duke, 7-12-45	North Battleford, Sask.
Capt. C. A. Benson, 11-1-46	Toronto, Ont.	Major H. R. Kerr, 4-1-46	Regina, Sask.
Major H. P. Bishop, 27-12-45	Haliburton, Ont.	Capt. F. G. Pedlar, 13-12-45	Oxbow, Sask.
Capt. R. Brown, 9-1-46	Toronto, Ont.	Capt. S. R. Moscovitch, 10-11-45	Regina, Sask.
Major W. G. Bruce, 2-1-46	Trenton, Ont.	Capt. G. I. M. Robb, 3-1-46	Regina, Sask.
Capt. W. D. Chapple, 19-12-45	Toronto, Ont.	Capt. R. E. Dickson, 20-12-45	Wainwright, Alta.
Capt. G. K. Clarke, 19-12-45	Toronto, Ont.	Capt. A. A. Downey, 18-12-45	Calgary, Alta.
Capt. J. A. Cummer, 13-12-45	Hamilton, Ont.	Capt. A. L. Goodman, 6-12-45	Alliance, Alta.
Major S. Duncanson, 13-12-45	Glencoe, Ont.	Capt. C. D. Husband, 6-11-45	Red Deer, Alta.
Capt. H. W. Eckel, 5-1-46	Toronto, Ont.	Capt. R. L. Lynn, 18-12-45	Lethbridge, Alta.
Capt. W. R. Elgie, 26-12-45	London, Ont.	Capt. J. Moscovitch, 29-11-45	Lethbridge, Alta.
Major N. S. Gage, 31-12-45	Kingston, Ont.	Capt. W. H. Murray, 19-12-45	Edmonton, Alta.
Capt. N. T. Godfrey, 18-10-45	Ottawa, Ont.	Capt. W. A. McIver, 14-12-45	Edmonton, Alta.
Capt. B. Gross, 8-1-46	Toronto, Ont.	Major A. Singer, 8-1-46	Edmonton, Alta.
Capt. H. A. Hunter, 12-12-45	Toronto, Ont.	Capt. J. G. Walker, 21-11-45	Calgary, Alta.
Major M. E. Jarrett, 4-1-46	Jarvis, Ont.	Capt. C. T. Billingsley, 5-12-45	Vancouver, B.C.
Capt. C. Lampel, 5-1-46	Toronto, Ont.	Capt. K. M. Coons, 8-12-45	Victoria, B.C.
Capt. D. O. Lipman, 15-12-45	Toronto, Ont.	Capt. J. T. Dawson, 15-12-45	Vancouver, B.C.
Capt. H. S. Mason, 14-12-45	Richmond Hill, Ont.	Lt.-Col. W. J. Gibson, 21-12-45	Victoria, B.C.
Capt. J. C. Milne, 30-11-45	Orangeville, Ont.	Capt. N. W. Huculak, 14-12-45	Nanaimo, B.C.
Capt. J. F. Morton, 29-10-45	Southampton, Ont.	Capt. G. W. McKenzie, 3-1-46	Vancouver, B.C.

"Quite as many people are ill because they are unhappy as are unhappy because they are ill."

CANADIAN DENTAL ASSOCIATION NEWS

FROM THE OFFICE OF THE SECRETARY

Annual Meeting of Board of Governors

Place — Toronto at King Edward Hotel.

Dates — May 22 to 25, 1946.

National Convention of Canadian Dentists

Place — Toronto at Royal York Hotel.

Dates — May 27 to 30, 1946.

Details respecting the program are appearing in the Journal.

Housing will be the greatest difficulty to be overcome. Your reservations should be applied for at once. From present indications this convention will be one of the most outstanding ever held in Canada.

Council on Dental Education

Decision has been made to hold the meeting of the Council on Dental Education later in the year rather than preceding the meeting of the Board of Governors.

Dental Personnel in Canada

The annual census of the dental profession in Canada is herewith presented in an accompanying chart. An effort was made this year to record the movement of dentists which is also shown in table form.

As compared to last year an increase of 36 in the total number of dentists in Canada is found. Whereas the number of deaths and retirements last year were 84, there are 64 deaths and 29 retirements recorded this year or an increase of 9.

On January 1, 1946, some 901 of the dental profession were, as far as known to the Provincial Registrars, in Military Service. On the same date last year there were 1250. The number has rapidly diminished since this census was recorded. The maximum number in Military Service occurred sometime during 1945, after the graduating classes from the dental schools received appointments and before retirements became accelerated.

Only some 20 dentists moved out of the province in which they were located during the year. Nine of these moved from Manitoba. The greatest number (9) moved to British Columbia.

The ratio of dentists to population according to the 1941 census is given. This ratio is based upon the total number of dentists (civilian and military) as reported by the Provincial Registrars. Ontario leads with one dentist to 1798 of the population with British Columbia second with one dentist to 2005 of the population. These positions were held by Ontario and British Columbia at the depth of the depletion of dental personnel due to war service. The other provinces are changing their ratio positions and an interesting comparison to pre-war ratios will be possible when those in Military Service have resumed civilian practice.

Although the increase in total personnel is small (36) over last year, it is with some satisfaction that a loss is not reported. As far as known Canada is exceptional in this regard, when compared to other countries. Compara-

STATISTICAL DATA RE DENTAL PERSONNEL IN CANADA

(as reported by Provincial Registrars)

AS OF JANUARY 1ST, 1946

Province	Number of Dentists in Province	Ratio of total No. of Dentists in Province to population. 1941 Census	Number of Dentists in civilian practice	Number of Dentists in Military Service	Number of deaths during 1945	Number of retirements during 1945	Number added during 1945	Number who moved elsewhere to practice during 1945
Pr. Ed. Island....	28	1/3395	25	3				
Nova Scotia.....	188	1/3074	143	45	2	3	5	
New Brunswick...	105	1/4356	91	14	1		1	1
Quebec.....	1014	1/3286	847	167	9	3	36	
Ontario.....	2107	1/1798	1621	486	35	8	66	3
Manitoba.....	234	1/3119	219	15	4	2	3	9
Saskatchewan....	191	1/4691	167	24	2		1	3
Alberta.....	230	1/2745	214	76	1	5	9	3
Br. Columbia....	408	1/2005	337	71	10	8	42	1
Canada Total	4565	1/2521	3664	901	64	29	163	20

MOVEMENT OF CANADIAN DENTISTS DURING 1945

From; To;	P.E.I.	N.S.	N.B.	P.Q.	Ont.	Man.	Sask.	Alta.	B.C.	U.S.	UNNRA	N.W.T.
Pr. Ed. Island												
Nova Scotia												
N. Brunswick				1								
Quebec												
Ontario		1							1		1	
Manitoba					2		1		4	1		1
Sask.					1				2			
Alberta					1				2			
Br. Columbia										1		

tive figures are as follows (as of January 1st, each year):

1938 — — — — — 4174
 1943 — — — — — 4294
 1944 — — — — — 4405
 1945 — — — — — 4529
 1946 — — — — — 4565

President's Eastern Tour

Dr. Reid and the Secretary made the following visitations on the dates indicated:

March 4th — — — Montreal
 March 5th — — — Quebec City
 March 7th — — — Halifax
 March 8th — — — Saint John

Largely attended meetings were held at each centre and your Officers were greeted with great enthusiasm for the work of the Canadian Dental Association. Credit is due to all those who organized the meetings and thanks expressed for the many courtesies extended. The spirit exemplified at the meetings was of the highest calibre, which raised the hopes of your Executive officers. Much first-hand knowledge was gained of local dental matters and it is hoped that a contribution was made by your ambassadors.

DON W. GULLET.
 Secretary.

The Edgar Paul Commemoration Fund

At the close of the present year, Dr. E. W. Paul will relinquish the major portion of his teaching duties with the Faculty of Dentistry, University of Toronto. In commemoration of his outstanding service to Dentistry, a fund is being established to have his portrait placed in the Faculty of Dentistry. Any of his friends

desirous of contributing may do so by mailing their contribution to the Fund c/o Dr. Douglas Tanner, 230 College St. Toronto.

Class 2T3

The twenty-third Reunion Dinner of 2T3 Class will be held on May 27, at 6:30 p.m. at the Royal York Hotel.

Plan now to attend this meeting when final arrangements will be made to present our Scholarship Fund to the University.

We have not yet reached our objective. Those who have not yet contributed are urgently requested to do so at once.

Owing to shortage of help and supplies the Hotel demands to know in advance the number of dinners to be served. Those planning to attend please drop a card soon to Jesse Fullerton, 2 College St., Toronto, 2.

Class Re-Unions

The following classes are having re-union parties during the National Convention of Canadian dentists at the Royal York Hotel in Toronto on Monday evening, May 27. Class members should contact their class representative as follows:

Class 2T1—Roy Kerr, 633 Danforth Avenue, Toronto

Class 2T6—A. J. Vince, 648 Danforth Avenue, Toronto

Class 1T6—H. R. Conway, 421 St. Clements Avenue, Toronto

Class 3T6—S. C. Shumacker, 380a Bloor Street, W., Toronto

Class 2T3—Jesse Fullerton, 2 College Street, Toronto

NEWS FROM THE PROVINCES

QUEBEC

The Montreal Dental Club

The February meeting of this club took place in The Mount Royal Hotel on February 18. In the absence of the president, Dr. A. W. Mitchell, due to illness, the chair was occupied by the president-elect, Dr. R. B. Bell.

Papers were presented by Dr. C. R. Seller on "The Applications of Acrylics in Operative Dentistry" and Dr. J. C. Flanagan on "Precise and Simple Technique for Opening the Bite".

Dr. Seller based his paper on a review of the clinic presented at last year's Fall Clinic by Dr. George A. Coleman of Philadelphia. He did not advocate the general and unscrupulous use of acrylic restorations anywhere and everywhere in the mouth, but he did maintain that they had a very definite place in operative dentistry when used in carefully selected cases and when properly re-inforced. He recommended the use of the acrylic jacket crown without any reservations in cases of fractured incisors in children; the pulps of these teeth must be protected to save their vitality and this can be simply and aesthetically done with acrylic jackets. If these fractures are not restored, besides the possibility of loss of the pulp bad tongue and lip habits may develop and a "deadpan" expression due to the child's embarrassment in smiling. Dr. Seller described the simplicity of the preparation required in these cases with no labial surface preparation and seldom any lingual surface preparation being necessary. He emphasized that these were temporary restorations until the child becomes older.

In discussing the use of acrylic jacket crowns in adults Dr. Seller pointed out the necessity for a well defined shoulder and some form of re-inforcement for the material, favouring the cast gold thimble.

Dr. Flanagan presented his technique for opening the bite with fixed restorations. He stressed particularly the need for sound diagnosis before embarking on complete mouth reconstruction and the great necessity of securing a balanced occlusion in the finished case.

The Mount Royal Dental Society

The 25th. anniversary of the founding of the Mount Royal Dental Society was marked

by the holding of a dinner dance in the Windsor Hotel on February 23, with Dr. J. Fineberg presiding.

Guests of the Society on this occasion included Dr. S. Bass of New York, Honorary Member of the Society, Dr. D. P. Mowry, President of the College of Dental Surgeons, Province of Quebec, Dean A. L. Walsh of McGill University; Dean Ernest Charron of the University of Montreal; Dr. A. W. Mitchell, President, Montreal Dental Club; Dr. A. Hebert, President, Société Dentaire de Montreal; Dr. A. D. Richardson, President, Montreal Endodontia Society, all of whom brought messages of good will from their respective organizations.

The Society was toasted by Dr. D. P. Mowry who in his address laid particular stress on the scientific and medical aspects of dental practice. Dr. Bass responded to this toast.

Dr. A. S. Solomon, first president of the Society, gave a resumé of its history.

A copy of an illuminated address was presented to those members of the Society who had seen service in the Canadian Dental Corps, by the president, Dr. J. Fineberg.

The committee, which so successfully arranged all the details of this function, was under the chairmanship of Dr. D. L. Muhlstock.

The Montreal Dental Nurses' and Assistants' Association

At the February meeting of the Association held in the Mount Royal Hotel a very interesting program was presented with Mr. Robert Wygant of the Winthrop Chemical Co. as guest speaker. Mr. Wygant showed a film on "Regional Anaesthesia" which depicted operations in various parts of the body using local anaesthesia.

Affiliated with the Canadian Dental Nurses' and Assistants' Association at a meeting held in Winnipeg in June 1945, the constitution of the Association was submitted to the members at this meeting, for their approval.

BRITISH COLUMBIA

Vancouver and District Dental Society

The Society held its regular monthly meeting on March 5, in Hotel Vancouver. The

guest speaker was Doctor Harold S. Burkhart of Seattle, Washington, who presented a paper on "Davis Silicate Technique."

Following this paper there were two table clinics: Doctor A. MacWhinnie, on "Davis Silicate Technique", and Doctor H. Burkhart, on "Sweeney Amalgam Technique".

Both these clinicians are members of the Seattle Study Club and they presented to the Society many interesting points on amalgam and silicate restorations.

This meeting was very well attended; interest in the Dental Society is at a new high, and promises to stay that way.

The following were elected to membership:

Dr. L. S. Young, — Graduate of the
Univ. of Alberta.

Dr. Max Nacht — Graduate of the
Univ. of Toronto.

Dr. G. I. Creasy — Graduate of the
Univ. of Toronto.

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Vancouver Dental Assistants' Association

This Association has taken new life. On January 14, our annual meeting, the efforts of a small group of dental assistants who had persisted in their efforts to inject new enthusiasm into the organization, were well repaid; 39 girls attended the banquet and meeting.

The following officers were elected:

President.....	Rita Cowan
Vice-President.....	Olive Howarth
Secretary.....	Rita Russell
Treasurer.....	Winnifred Whitehead
Membership.....	Pennie Prendergast
.....	Kottie Syme
Entertainment.....	Phyllis Kelly,
.....	Phyllis Evans

After the new officers had been duly installed and had taken over the conduct of the meeting, open discussions were entered into very enthusiastically regarding the activities of our organization for the coming year. Twenty-eight paid up members was the first nights achievement.

Our second meeting on February 11 was held at the Piccadilly Cafe where a delightful repast was enjoyed by 45 members. Our newly elected president, Rita Cowan, presided.

After the banquet our President introduced Major H. Simmons of the Canadian Dental Corps who recently returned from active ser-

vice in Northwestern Europe. Major Simmons delivered a most eloquent and enlightening address on the activities of the Canadian Dental Corps from D Day to V E Day. Major Simmons commanded such attention from those present that it lingered on into the business meeting.

At the request of the President, our guest speaker officiated at the drawing of the door prize (a pair of nylons) which was won by yours truly (the secretary). How envious the rest were!

We then proceeded rapidly into the business of the evening. A most encouraging report was presented by the Membership Committee and we look forward to large and enthusiastic meetings. Our President gave a report on the Washington State Dental Association Convention which she recently attended in Seattle. The adoption of Mrs. Edwards birthday box idea was inaugurated, but no one had a birthday, so everyone cleared their purses of pennies. It is really surprising what can be accomplished. We are having a drawing for a pair of hand knitted socks at our next meeting and we hope that one of our bosses will be the lucky winner.

RITA RUSSELL, Sec.

ALBERTA

Calgary Dental Society

The regular meeting of this Society was held in the Palliser Hotel on February 11. The principal business was the election of officers. The following were selected: President, Dr. A. C. Steeves; Vice-President, Dr. C. M. Lowry; Sec.-Treas., Dr. Fred Murray.

An interesting and educational film entitled "Vitamins and some Deficiency Diseases" loaned by Lederle Laboratories, was enjoyed. The dental assistants were the guests of the Society.

The March meeting of this Society was held in the Palliser Hotel on March 11.

Due to illness, Dr. Harry Gilchrist, Edmonton, who was to have given a paper on "Denture Technique," was unable to attend. In his place Dr. John Clay showed a film on "Oral Surgery relating to Cyst Removal" which was very informative and much enjoyed by the forty men present.

Preliminary plans for the Western Canada Convention for 1947 were further advanced in discussion.

Lethbridge Dental Association

At the February meeting of this Association the following officers were elected: President, Dr. Ward Clark; Vice-President, Dr. A. C. Ahrens; Sec.-Treas., Dr. J. Carson.

Dr. W. Scott Hamilton, Dean of the Faculty of Dentistry University of Alberta gave this Association a very successful lecture clinic on March 8-9. On March 8, a dinner was held followed by the lecture and later slides. On March 9, Dr. Hamilton demonstrated by practical work, some of the newer ideas in oral surgery. District dentists from Taber, Raymond and Pincher Creek attended.

SASKATCHEWAN**Saskatoon Dental Society**

This Society held its regular meeting at the Bessborough, March 12. The guest speaker was Dr. Bleakley, who holds both medical and dental degrees. His subject was "Cysts", with special stress on their embryology and pathology as related to Dentistry.

Dr. Shirley Locke, now in charge of the D.V.A. office here, spoke briefly on the proper procedure of filling out D.V.A. forms, which was greatly appreciated by the Society.

Dr. Gillies who is retiring from active practice was guest of the Society, and several of the members spoke briefly, reminiscing of old times with Bill Gillies. The Chairman then made a presentation to Dr. Gillies, on behalf of the Society, of a Shaeffer life-time pen, and extended good wishes expressing the appreciation of Dr. Gillies services to the profession.

Regina Dental Society

This Society held its regular meeting at the Drake Hotel, March 12. The guest speaker was Dr. W. A. Riddell, of the Provincial Dept. of Public Health, who is in charge of the laboratory. He spoke on "The Laboratory and Your Health".

Major R. S. Rose, chief of the Dental Division, H. District, Dept. of Veterans Affairs, outlined the procedure his department employs re dental treatment for discharged personnel. He thanked the dentists of Regina for their splendid co-operation in this enormous task.

The Society is happy to welcome back from overseas Capt. Oliver Brett, Oliver is the son

of Dr. A. J. Brett, Sec. Registrar, Dominion Dental Council of Canada.

MANITOBA**Winnipeg Dental Nurses' and Assistants' Association**

The members of this Association entertained their dentists at the March dinner meeting. The meeting was held in the Medical Arts Building Club Rooms. The guest speaker of the evening was Mr. Wing, Consul of the Republic of China. He spoke on the cultural and historical background of the Chinese people.

A business meeting followed at which it was decided to send Miss Hazel Wylie to Toronto in May as a representative to the meeting of the Canadian Dental Nurses' and Assistants' Association. The proposed constitution of the Canadian Association was read and discussed and a few minor changes were suggested which will be forwarded to Toronto.

Jane McClure.

ONTARIO**Complimentary Dinner to Dr. W. E. Willmott, Dr. Arnold Clarkson, Brig. F. M. Lott**

On March 1 members of the Faculty of Dentistry, University of Toronto gathered at the Granite Club to do honour to three retiring members of the staff. Dean Mason was toastmaster of the evening and was a very gracious host. He asked Dr. J. H. Johnson to present the guests of honour which he did in delightful fashion paying tribute to each in turn.

Dr. Willmott, affectionately known as Dr. Walter, has a long record of achievement in the various positions he has occupied both as a dentist and as a citizen. He was 43 years a member of the dental school staff, secretary-treasurer of the Royal College of Dental Surgeons from 1915 to 1940 and continuing as treasurer until 1945 when he retired. Dr. Johnson referred to Dr. Willmott's high ideals and said: "His religion was not a shield to be worn for adornment but a light to be seen." Students remember Dr. Willmott as a teacher of course, but for many other associations too, not the least of which was entertainment in his home. His dear wife was her husband's counterpart and Sunday evening visits for tea were occasions ever to be a cherished memory.

Dr. F. Arnold Clarkson joined the teaching staff in 1904 as lecturer in Physiology and in 1913 assumed the chair of Medicine as well. Dr. Johnson referred to Dr. Clarkson as a man possessing a philosophic frame of mind and quoting Emerson "He is a great man into whose realm of thought I rise with difficulty." Dr. Johnson recalled a senior student telling him that Dr. Clarkson was a lecturer he should never miss; and students throughout the years will confirm this assertion. Dr. Clarkson always had natural humour and wit with which to enthuse his students during his lecture hours—yes and as he said himself "Lectures without enthusiasm were like an east wind for empty bellies."

Brig. Frank M. Lott, recently retired Director General of the Canadian Dental Corps, joined the staff in 1928 assuming the chair of Prosthodontia with a full professorship. Dr. Johnson referred to this as a unique achievement in itself. Brig. Lott was awarded his Ph.D. for a thesis he wrote on Canadian Dental Corps organization and at the outbreak of war was given leave of absence from the Faculty to direct this service. His Majesty has seen fit to award Brig. Lott with the M.B.E. On retirement from his military duties he has joined the Research Staff of the Dentists' Supply Company and will live in New York.

The guests of honour were presented with a fountain pen desk set to commemorate the occasion. Dean Mason in bringing the memorable function to a conclusion wished the guests many more years of useful service to Dental Science.

Toronto and District Dental Golf Association

The Spring and Fall tournaments will be held in early June and September respectively. Watch for further announcement.

Hamilton Dental Association

A regular meeting of the Hamilton Dental Association was held on the evening of March 15. Following the dinner, President, Dr. Wallace Baxter, called upon Dr. Field to introduce the speaker for the evening. Dr. J. C. Krantz Jr., of the University of Maryland, Baltimore, Dr. Krantz gave an interesting history of anti-infection drugs with special reference to the history and action of the sulpha

drugs and penicillin. The speaker was one of the most fluent and interesting essayists heard by this Association during the past ten years. At the conclusion of the meeting, Dr. Hyde complimented the speaker upon his clever presentation.

H. J. TOTTON, Secretary.

Academy of Dentistry, Toronto

On March 14, Dr. John C. Krantz was guest speaker at the final meeting of this society for the present season. His subject was "The Development of Anti Infection Drugs" and the presentation was one of the finest in Toronto for some time.

President Harold Swales presented the new officers for 1946-1947 as follows: President, Dr. Colton Bliss, President-Elect, Dr. Harold Shepherd, Secretary, Dr. J. H. Johnson, and Treasurer Dr. E. A. White. Members of Council are: Dr. Anthony Vince, Dr. R. J. Godfrey, Dr. Gordon Frawley, Dr. Mark Boyes and Dr. George Hare.

After the meeting, Dr. Colton Bliss entertained the new officers, Dr. Krantz and representatives of other dental groups.

Best wishes are extended to Dr. Bliss and his Council for a successful season in 1946-47.

Comment on Visit of Dr. Bernhard Gottlieb to Toronto

The etiology and control of dental caries have been demonstrated over the years to constitute a question of such complexity and difficulty that this disease must be classified as one of the major problems in modern biological research. Many hypotheses have been submitted and a vast amount of careful and significant work has been done by investigators in many parts of the world; this is readily seen by a survey of the literature, including such works as the American Dental Association's compilation of authors' summaries under the title of "Dental Caries". At first glance it might seem that the multiplicity of theories and concepts would indicate much confusion and divergence of viewpoint, with many fundamentally irreconcilable schools of thought.

I do not believe that this is the case. It has been a cause of great satisfaction to me to see what I believe to be the gradual emergence of a composite pattern of thought into which all findings to date which are susceptible, within

their scope, of confirmation and demonstration, are beginning to assume perspective and to make their clarifying contribution to what might be compared to a vast scientific jigsaw puzzle. It is true that in this ultimate solution elements which have been temporarily accorded a dominating role may recede somewhat in the functional pattern of the whole, but such is the historical process in any problem of comparable complexity.

The visit of Dr. Bernhard Gottlieb to Toronto, under the auspices of the Alpha Omega Society, was a happy and illuminating occasion. Dr. Gottlieb spoke to the students of the faculty of Dentistry on biological considerations relating to secondary dentine, advancing the concept that the function of the odontoblast is to preside over a mechanism providing lubrication of the amelo-dentinal junction, which is vital to optimal maintenance of the attachment of enamel to dentine. On the evening of March 12, he addressed a meeting, open to all members of the profession, upon the control of dental caries.

To summarize, in a few sentences, the basis of his presentation—The tooth enamel is vulnerable to bacterial attack through its "organic invasion roads", namely, the lamellae and the prism sheaths. True caries is not a resultant from external attack from acids produced upon the tooth surface, but is a process consisting fundamentally of a bacterial invasion of the organic roads with the production of a yellow pigmentation and ultimately of necrosis. A second bacterial invasion of the tooth substance by "acid formers" usually accompanies, to a varying degree, the fundamental proteolytic process. Acid production follows this second process; but, in the enamel the environment is such as to permit only extremely limited amounts of acid to be produced *in situ*. Also, within the enamel, chemical reactive processes may limit the above phenomena to the point of arrest. However, if the process reaches the dentine, the environment is such as to offer a much more favorable culture medium and the process may progress with destructive rapidity.

Control of the above sequence, either naturally or artificially, would seem to require, therefore, a chemical blocking of the organic invasion roads of such a nature as to prevent bacterial entry. In the naturally immune mouth this would seem to be furnished in a physiolo-

gical way through the original elements of the saliva or through substances liberated within it. In the absence of such natural protection an artificial control, secured through impregnation processes which may, for varying periods of duration, successfully block the invasion roads, is obviously a procedure of value. The application of fluorine, with its well-known affinity for calcium, has been widely acclaimed as having clinical value.

Gottlieb has developed a simple procedure for impregnation which, through careful tests, has convinced him of its high efficacy in caries control. Briefly, with the aid of a wetting agent, Nacconol (commonly used in industry) he precipitates a silver solution by means of a sulphathiazole compound, with the result that the organic invasion roads are chemically blocked. He advises the application of the impregnating bactericide three times per year, although recent studies have suggested that even less frequent application may be adequate. The chemicals employed will be available in Canada shortly. There is no secret regarding Gottlieb's findings, nor does he have any connection whatever with the marketing of the chemicals which have been developed by a former Vienna chemist now located in New York.

In considering the above work one immediately sees the essential harmony between the concepts outlined and the fatty acid theory so carefully studied and demonstrated by Dr. Harold Box. In other words, the protection afforded the teeth from fatty acids elaborated within the mouth and, in favorable cases, constituting the immediate environment of the tooth, may effectively achieve a blocking of the organic invasion roads and a consequent inhibition of the carious attack. Regional protection of this nature may be seen in non-immune mouths also, in the lower anterior area.

Further, as one contemplates the philosophy of the impregnation control method and its implications as the phenomena of natural control in immune or relatively immune individuals, it would seem not impossible, as I have earlier indicated, to postulate an emergent pattern in which many factors, now undergoing careful investigation, play their appropriate part—anatomical factors, nutritional essentials to optimal salivary function, general metabolic states, salivary chemistry, bacteriological factors, etc.

Mechanisms of control of disease do not, of themselves, explain many problems relating to optimal physiological function, etiology of disease, etc., but, to the imaginative mind, they open new doors and reveal new horizons in addition to making available new methods of prevention of incalculable value to society. I look confidently to the not too distant future for marked clarification, not only of methods of control, but of our understanding of the philosophy of this important disease.

R. GORDON AGNEW.

DENTAL NURSES AND ASSISTANTS

The Ontario dentists are welcoming dentists from all parts of the Dominion to the National Convention of Canadian dentists being held in Toronto this year.

We, the Ontario Dental Nurses and Assistants would also deem it a privilege to have guests from all the provinces attend our meetings. With this in mind the committees have planned a program which will be worthy of time and travel.

To all girls interested in dental assisting we extend a hearty welcome to our Convention at the Royal York Hotel in Toronto, May 26-29.

ANNE KIRKLAND, President.

Brantford Affiliated Association:

The members of the Brantford Dental Nurses' and Assistants' Association met at the home of Mrs. A. Brown on February 13. A report on the executive meeting held in Windsor was presented and plans discussed for the coming Convention. Refreshments were served by the hostess and a social hour enjoyed at the conclusion of the business meeting.

Hamilton Affiliated Association:

Doctor Irvin Ante of the Faculty of Dentistry, Toronto University, was the guest speaker of the Hamilton Dental Society at their meeting in the Royal Connaught Hotel on February 13. The members of Hamilton Affiliated Association were the guests of the Dental Society and had the privilege of hearing Dr. Ante's interesting address.

Kitchener Affiliated Association:

Miss Shirley Letson entertained the members of the Kitchener Dental Nurses' and Assistants' Association at her home on February

6. At this meeting convention plans were made and the results of Penny-drive announced. During the evening a spelling bee of dental terms was conducted. Refreshments were served by the hostess assisted by Eileen Damher. On February 18, the girls had a party at the home of Mrs. Marquis in Hespeler. (Mrs.) Edith Oberholtzer, the first president of Kitchener Association, was a special guest on this occasion.

London Affiliated Association:

The London Dental Nurses and Assistants met for dinner at Wong's Cafe on February 13. Later, they adjourned to Dr. A. J. Gillies' office for their business meeting. Miss Betty Adams, Assistant Superintendent of Westminster Hospital, gave a most interesting talk about her activities and therapy treatments, for the patients at the hospital. Several out-of-town members attended this meeting.

Toronto Affiliated Association:

Dean Hurst, of the College of Pharmacy, Toronto University, gave a very interesting and entertaining address on "Men Whom I Have Walked With" at the January meeting of the Toronto Affiliated Association. This was their annual "Doctors' Nite" and proved to be a most enjoyable evening. Punch and cookies were served after the meeting. In February, the members had a sleighing party at the Maple Creek Park Club House. There was skating and other entertainment for those who did not wish to sleigh. Refreshments and dancing concluded this enjoyable event.

Windsor Affiliated Association:

The Windsor members had a "Pantry Show-er" in honour of Miss Lee Grossetti at the home of Dr. & Mrs. Robinson. Dancing was enjoyed during the evening and Mrs. Robinson served a lovely buffet supper.

Benevolent Fund

Ontario Benevolent Fund is used for comforts for the permanently ill patients at the Red Chevron Military Hospital. The convener, Mrs. L. Blaber, 148½ Bloor St. W., Toronto, will be very glad to receive any aid the Affiliated Associations can give. What are you going to do for this worthy effort?

RUTH JANKE.

EMPIRE NEWS

PROPOSED SCALE OF FEES

Recommended by the Joint Advisory Dental Council of the B.D.A.

1. *Scaling and treatment of the gums per individual:—*
10s. 6d. in each jaw but not chargeable if fewer than two natural teeth are to remain in either jaw after completion of the dental treatment specified in the estimate.
2. *Fillings, per filling:—*
10s. 6d. with a maximum charge of £1 1s. for filling any one tooth.
3. *Root treatment, per tooth:—*
15s. with a maximum charge of £1 16s. for fillings and root treatment in any one tooth.
4. *Extractions:—*
First tooth 5s., each subsequent tooth 2s. 6d., to a maximum of £3 3s.
5. *General Anaesthetic Fee:—*

1-6 teeth,	10s. 6d.
7-14 teeth,	£1 1s. 0d.
15-22 teeth,	£1 11s. 6d.
Over 22 teeth,	£2 2s. 0d.
6. *Dentures:—*
One or two teeth £2 10s., plus 5s. for each additional tooth to a fee of £10 for full upper and lower or £5 10s. for a full upper or lower.
7. *Repairs:—*
First item 15s., each subsequent item 7s. 6d. Maximum £1 10s.
8. *Remakes:—*
80 per cent of denture fee provided that if the denture is remade within twelve months by the same dentist the fee shall be half the appropriate fee under Item 6 and if over 5 years the full fee for new dentures shall be charged.
9. *Crowning, per crown:—*
(Including any necessary root treatment), £3 3s.
10. *Examination and Report:—*
7s. 6d., chargeable if the patient had six or more natural teeth in the mouth at the time of the examination, or does not return for treatment.

GENERAL NEWS

Miracle Drugs

At the 1946 meeting of the Chicago Dental Society many of the returned veterans reported their experience on the fighting fronts. Sulphonamides and penicillin were used extensively in combating oral infection. Dr. William S. Hoffman of Chicago, research director of Hektoen Institute for Medical Research, Cook County Hospital, in discussing penicillin and its possible use said that penicillin, sometimes called the miracle of modern medicine, proved to be just a lop-sided miracle that cures lobar pneumonia, for instance, but doesn't touch the common cold. In other words it is no panacea for human ailments. Just as in the case of the sulphonamides, Dr. Hoffman stated, bacteria are sensitive to penicillin and become resistant if grown in concentrations of penicillin too small to kill them. There is great danger

in the topical application of penicillin because, where it is administered without regard to the blood levels, patients become sensitized needlessly.

Dr. Carl W. Waldron of Minneapolis confirmed Dr. Hoffman's statements and said that, while sulphonamides and other chemical agents were used extensively in war wounds, the local application of these drugs, in the final analysis, worked at a disadvantage. He said that the progress in wound management points away from the introduction of any chemical agent into a wound for its supposed anti-septic effect. The war experience of dental officers afforded them the opportunity of using penicillin on a large number of patients with acute trench mouth. The time required for cure was cut in half by exclusive penicillin therapy.—B. of Chi. D. Soc.—

Observation of Increased Caries Activity Following Interruption of Topical Fluorine Applications

by H. Berton McCauley and Peter P. Dale
Division of Dental Research, the University of Rochester, School of Medicine and Dentistry, Rochester, N.Y.

Summary of paper, Jour. of D. Research, Dec. 1945.

A 2-year investigation of the incidence of caries in 361 teeth of 21 children between 2 and 13 years of age revealed a marked increase in rate following suspension of periodic topical applications of a sodium fluoride solution received over a period of 1 year. The results suggest that the caries-inhibiting effect of a series of topical fluorine administrations is restricted in the absence of continued applications.

Postgraduate Training at Illinois

A \$50,000 grant from the W. K. Kellogg Foundation of Battle Creek, Mich., will aid the University of Illinois in setting up a three year program of postgraduate training for dentists, primarily those just returning from military service.

While the Kellogg grant will extend only over a three year period, the University plans to continue the postgraduate program with its own funds after that time.

The Kellogg money will be used primarily to augment the teaching staff of the College of Dentistry for the expanded program.

New A.D.A. Pamphlet

A new pamphlet entitled, "Blue Print for Dental Health", in which the compulsory health insurance system proposed by the Wagner-Murray-Dingell bill is compared with the national dental health program of the American Dental Association, is now being distributed free to members of the profession and the general public.

No Full Meeting of the A.D.A. This Year

The Board of Trustees of the American Dental Association has decided that because of travel and hotel conditions, it would be unwise to hold a full meeting of the Association this year. In all probability the House of Delegates' meeting will be held in October in Miami, Florida, granting that the hotel situation is such to permit of such a gathering.

Booklet for Assistants

The Ritter Company has just published an attractive booklet, well illustrated, for Dental Assistants entitled "The Dentists' Diplomat" which should be read by dentists as well as assistants, as it might help many dentists in solving the problem of how to direct his assistant's activities along profitable channels.

All dentists have their own ideas as to what constitutes ideal service and many will not agree with every suggestion made in this booklet but on the other hand many suggestions may prove most helpful and for this reason this treatise should be perused carefully.

A Test of the Effect of Fluoride-Containing Dentifrices on Dental Caries

by Basil G. Bibby,
Tufts College Dental School, Boston, Mass.
Summary of paper in Jour. D. Research, Dec. 1945.

A 2-year study of the effect of the use of fluoride-containing dentifrices was carried out on groups of dental students and orphanage children. No evidence of a reduction of caries activity was found.

The Butter-Margarine Controversy

by Harry J. Deuel, Jr., School of Medicine, University of Southern California
Excerpts from Science.

The question which vitally interests all of us is whether we need to feel undue alarm from a health standpoint at the present-day scarcity in butter. In other words, need we be necessarily distressed not only for our adult population but especially for our growing children if the butter shortage continues over a prolonged period? Experiments reaffirm the fact that vitamin-fortified margarine and butter have a substantially equivalent nutritional value.

The nutritional value of milk is not confined to the fat; it possesses proteins of excellent quality and it is an excellent source of certain inorganic salts needed in the diet, such as calcium and phosphorus. Milk is an especially adequate source of riboflavin. We can scarcely view with concern the increasing use of margarine in the diet if that means that larger amounts of whole milk become available at a reasonable cost for human consumption.

Toothbrushes

The majority of the American people do not brush their teeth. Half of them don't even own a toothbrush.

These conclusions about the oral hygiene habits of the citizens of the U.S.A. were reported by Dr. H. Berton McCauley, D.D.S., of Washington, D.C. in the *Journal of the A.D.A.*

Dr. McCauley states that only 185,300,000 toothbrushes were manufactured in the United States in 1944, last year for which full statistics are available. Of this total, 78,800,000, or 43 per cent, were distributed directly to the armed services, the Red Cross and export agencies.

The remaining 106 million brushes available for civilians represented a major increase over the 70 million brushes Americans purchased in 1939, the last normal peace year. "But," wrote Dr. McCauley, "since approximately 220 million would be required to sup-

ply with two brushes yearly each person who is more than 2 and less than 60 years of age in the United States, it is evident that, even in the flush of wartime prosperity, the majority of Americans do not use toothbrushes."

Imports of toothbrushes, 90 per cent of which used to come from Japan, were completely halted with the outbreak of war in 1941. As a result, toothbrush production has become a major American industry with a volume of more than 12 and 1/2 million dollars a year, three times that of 12 years ago.

Typical of the Americanization of the toothbrush has been the widespread substitution of nylon filaments for hog bristles commonly used prior to World War II. The nylon filaments are more durable and elastic than natural bristles, Dr. McCauley said, but their relative merit as cleaning agents has not been determined. — *A.D.A. Release.*

IN MEMORIAM

Samuel Berrin, of Toronto, Ontario, aged 50, died on January 18.

He was graduated from the Faculty of Dentistry, University of Toronto in 1926 and practised in Toronto until forced to retire because of ill health.

Dr. Berrin is survived by his wife and one daughter.

•

Samuel Churchill Wilson, of Perth, Ontario, aged 87, died on February 19.

He was graduated from Philadelphia Dental College in 1889. He took a post graduate course in the School of Dentistry of the Royal College of Dental Surgeons in 1890. He conducted a dental practice first in Tweed, then Ottawa, and settled down in Perth in 1894.

Dr. Wilson was an honorary member of the Royal College of Dental Surgeons, having been in active practice for over 50 years.

He is survived by two daughters and one son.

S. L. Frawley, of Toronto, died in Toronto Western Hospital on March 22 at the age of 78 years.

He was graduated from the School of Dentistry of the Royal College of Dental Surgeons of Ontario in 1899. Following a post graduate course in Philadelphia, he began practice in Toronto where he continued until a short time ago. He specialized in Dental Oral Surgery.

Dr. Frawley was a member of the Royal Arch Masons, a member of St. Andrew's Lodge, A. F. & A. M. and of the Scottish Rite, Hamilton. He was an active member of Downtown Toronto Kiwanis; he played as Santa Claus for club's Christmas parties for 45 years. He was a keen bowler, being a member of the High Park Bowling and Curling Club.

He was a member of Windermere United Church and for 25 years was superintendent of the former St. Paul's Methodist Church Sunday School.

He is survived by his widow, one daughter and two sons, one of whom Dr. Gordon Frawley has been associated with his father in practice for many years.



Le Docteur GERARD de MONTIGNY, B.A., D.D.S., M.S.D.

*Rédacteur de la section française du
Journal de l'Association Dentaire Canadienne.*

Diplômé de l'Université de Montréal (1934); Maître "es-Sciences Dentaires" de l'Université Northwestern de Chicago (1935); Président de la Société Dentaire de Montréal (1939 et 1940); Professeur agrégé en chirurgie et anesthésie à la faculté de Chirurgie Dentaire de l'Université de Montréal; Chef de service, à l'hôpital du Sacré-Coeur, à Cartierville.

Rapport sur les Statistiques Dentaires *de la* Province de Quebec, 1938-1944

VIGER PLAMONDON, D.D.S., M.Sc.D., Quebec

(Suite)

Un comté à dix (10) dentistes:

BEAUHARNOIS.

QUEBEC avec ses cinq comtés a 41 dentistes, répartis dans Québec-Comté, Québec-Est, Québec-Centre, Québec-Ouest, St-Sauveur.

MONTREAL (comprend les Iles de Montréal et de Jésus) possède 447 dentistes répartis dans: St-Jacques, Jacques-Cartier, Jeanne-Mance, Laurier, Mercier, Notre-Dame de Grâce, Outremont, Ste-Anne, Ste-Marie, St-Henri, St-Louis, Verdun, St-Georges, Westmount.

Comme on peut le constater par cette nomenclature et cette énumération, il y a encore place pour d'autres licenciés dans cette province. Il reste, ce me semble, une tâche ardue tant pour la répartition des licenciés que pour la Commission d'Hygiène Dentaire dans un pareil champ d'action.

Pour les Iles de Montréal et de Jésus, la population est 1,138,431 personnes et il y avait en 1944, 447 dentistes; soit une proportion de 2,546 personnes par dentiste. Or pendant cette année là, 116 confrères étaient dans les forces armées. Donc, si tous reviennent s'établir dans ce district, le nombre des dentistes atteindra 563 licenciés avec une proportion de 2,022 personnes par dentistes. Ceci constitue, à notre humble avis, la plus petite proportion de toute la province.

Voulons-nous un exemple frappant de l'éloquence des chiffres soumis? Examinons bien cette énumération. . .

Endroits	Populations	Dentistes	Proportion par Dentiste
LA PROVINCE	3,331,882	723	4,608
ILES DE MONTREAL & JESUS	1,138,451 soit 1/3	447 soit 61.9%	2,546
BALANCE DE LA PROVINCE	2,193,431 soit 2/3	276 soit 38.1%	8,671

Il y a un autre facteur très important à considérer, et non le moindre, c'est la crise du logement. Lorsque vous étiez 447 licenciés à Montréal en 1944, les logements étaient rares même introuvables. Bienôt vous serez 563 confrères, qu'arrivera-t-il alors? Vos anciens combattants voudront-ils s'établir hors de votre district, après y avoir vécu plusieurs années? Voilà la raison d'être de ce rapport présenté devant vous ce soir. Voilà aussi le problème à résoudre, il est énorme et compliqué;

à suivre page 207

surtout pas facile à solutionner. Il me semble que le décongestionnement serait la réponse logique, mais sera-t-elle acceptée par les intéressés? Sincèrement, je ne le crois pas. Il nous faut trouver un autre moyen . . . un autre plan d'action. A nous tous d'y aller de nos suggestions, et ce, dans le plus court délai possible, car nos anciens combattants reviennent très rapidement. . .

HOPITAUX.

Nous comptons 107 hôpitaux répartis dans la province. De ce nombre, 21 sont dans la région de Montréal; 15 dans la région de Québec; 5 dans les comtés de Sherbrooke et de Charlevoix-Saguenay; 3 dans les comtés de St-Maurice, Matane, et Mégantic; 2 dans les comtés de: Abitibi, Beauharnois, Chicoutimi, Drummond, Gaspé est & ouest, Témiscamingue. 1 dans les comtés de: Argenteuil, Arthabaska, Beauce, Gatineau, Hull, Huntingdon, Iles de la Madeleine, Joliette, Lavolette, Lévis, Mississiquoi, Montmorency, Papineau, Richelieu, Rimouski, Roberval, St-Hyacinthe, St-Jean-Iberville, Stanstead, Témiscouata, Terrebonne. Que dire des comtés qui n'en ont pas?

De tous ces hôpitaux, on en compte 34 avec cliniques dentaires dont 21 dans la région de Montréal et 9 dans celle de Québec; ce qui fait 30 hôpitaux, il ne reste donc que 4 hôpitaux hors de ces deux villes ayant des cliniques dentaires. D'un autre côté, nous trouvons dans ces 34 hôpitaux, 76 dentistes attachés au service dont 61 à Montréal et 11 à Québec et 4 pour le reste de la province. Là encore, il nous semble, qu'il y aurait un immense travail à faire au point de vue dentaire. Soyons d'abord de vrais professionnels, imbus de science dentaire et médicale; il nous sera plus facile ensuite d'obtenir la reconnaissance de notre profession par les autorités médicales et partant des hôpitaux. Nous pourrions avoir plus aisément l'établissement de cliniques dentaires, et, nécessairement plus de dentistes attachés à ces services. Il est temps que nous sortions de notre torpeur, nous faisant valoir comme de vrais praticiens. Allons à l'oeuvre, Messieurs.

UNITES SANITAIRES PROVINCIALES.

En décembre 1944, il y avait 54 Unités Sanitaires établies dans la Province dont 19 étaient à la fois mobiles et stables; mais on ne comptait que 24 cliniques dentaires avec 30 dentistes attachés au service. Depuis, nous sommes informés que le nombre des cliniques et des dentistes a été sensiblement réduit. Pourtant, ce n'est pas la moisson qui manque. Ceci dit sans arrière-pensée. Ici peuvent s'appliquer les mêmes remarques que nous faisons au sujet des hôpitaux.

CLINQUES DENTAIRES MUNICIPALES.

Deux villes seulement, dans la province, sont pourvues de cliniques dentaires municipales. Ce n'est pas beaucoup, mais c'est mieux que rien du tout. Ce sont:

- a) — La Cité de Montréal avec ses 8 cliniques et 13 dentistes en service
- b) — La Cité de Québec avec sa 1 clinique et 2 dentistes en service

Total 9 cliniques et 15 dentistes en service

Il y aurait encore beaucoup à faire dans les cliniques de ces deux villes tant pour l'amélioration et l'augmentation des diverses spécialités de la dentisterie que pour le développement de l'hygiène dentaire publique de leurs populations. Ce noble effort déjà réalisé devrait être imité par d'autres villes de la province.

MOYENS DE COMMUNICATIONS.

Le tableau démontre aussi quels moyens de communications existent dans chacun des comtés. Le tout vous est indiqué:

- 1—par les routes provinciales numérotées,
- 2— " les lignes de chemins de fer qui les traversent,
- 3— " le nombre de lignes d'autobus qui les parcourent,

4—par les lignes de navigation fluviale ou de traversiers,

5— " les aéroports d'où se fait le service de passagers.

Tout ceci pour démontrer par quels moyens le commerce et l'industrie ont des chances de se développer, partant, faire voir de plus près, si un ou des dentistes peuvent vivre des revenus de la population.

CENTRE D'AFFAIRES.

Pour atteindre le but plus haut cité, nous avons indiqué le centre d'affaires dans chaque comté, centre qui est ordinairement l'endroit le plus peuplé et le plus favorisé des moyens de communications.

INDUSTRIES PRINCIPALES.

Comme corollaire au centre d'affaires, nous avons inclus au moins les 3 principales industries propres à chacun des comtés.

.....
Après avoir accumulé toutes ces données, il importe, ce me semble, que nous connaissions mieux nos propres organisations. C'est pourquoi, nous examinerons certains faits intéressants qui relèvent aussi des statistiques.

EDUCATION.

Où forme-t-on les chirurgiens-dentistes dans cette province? La réponse est déjà toute trouvée, savoir:

- Aux Facultés Dentaires des Universités a)—de Montréal.
b)—du McGill.

PUBLICATION.

Par quel medium de publication sommes-nous mis au courant des choses scientifiques récentes dans cette province? Par notre revue dentaire bilingue appelée:

- "*Le Journal de L'association Dentaire Canadienne*"
"*The Journal of the Canadian Dental Association.*"

Faisons en sorte qu'elle vive en lui fournissant des articles variés et intéressants. Pourquoi, par exemple, chacun des 32 gouverneurs n'écriraient-ils pas au moins un article par année? On pourrait en dire autant de chacun des professeurs de nos deux universités. Allons-y d'un peu de bonne volonté et la revue ne s'en portera que mieux.

ASSOCIATIONS.

A quelles associations majeures, nous les chirurgiens-dentistes, sommes-nous affiliés dans cette province? A cette question, trois réponses s'imposent pour la plus grande majorité d'entre nous, savoir:

- a)—Le Collège des chirurgiens-dentistes,
b)—L'Association Dentaire Canadienne,
c)—L'Association des chirurgiens-dentistes de langue française de l'Amérique du Nord.

SOCIÉTÉS DENTAIRES SCIENTIFIQUES LOCALES.

Les chirurgiens dentistes de cette province aiment-ils à s'instruire? Evidemment, puisque l'on compte onze sociétés dentaires scientifiques locales, réparties en deux groupes principaux, savoir:

- a)—de langue française,
b)—de langue anglaise.

Neuf sont de langue française.

- 1—La Société Dentaire de Montréal.
- 2—La Société Dentaire des Trois-Rivières.
- 3—La Société Dentaire de St-Hyacinthe.
- 4—La Société Dentaire des Cantons de l'Est.
- 5—La Société Dentaire de la Beauce.
- 6—La Société Dentaire du Saguenay.

- 7—La Société Dentaire du District de Beauharnois.

- 8—La Société Odontologique Canadienne.

- 9—La Société de Stomatologie de Québec.

Deux de langue anglaise.

- 10—Montreal Dental Club.

- 11—Mount-Royal Dental Club.

SOCIÉTÉ DENTAIRE COMMERCIALE.

Il existe aussi une société dentaire commerciale, unique en son genre, formée et composée exclusivement de chirurgiens-dentistes qui sont:

a)—Membres actifs (194)

b)—Membres non actifs (66)

société qui a pour nom "LE DEPOT DENTAIRE DE MONTREAL LTEE" avec siège social au No: 934 est, rue Ste-Catherine et succursale à 293 Boulevard Charest, Québec.

CORPS DENTAIRE CANADIEN.

Dès le début des hostilités, le Corps Dentaire Canadien fut organisé sur une base solide et bien équipée. Aussi nos confrères du Québec ont-ils répondu à l'appel qui leur fut fait de la part des autorités militaires. Jetons un coup d'oeil sur ce petit tableau pour constater:

1—Quel fut le nombre des enrôlements au point de vue linguistique?

2—Combien ont servi dans nos forces armées en général?

3—Quelle fut la proportion de ces enrôlements par rapport aux praticiens civils de cette province?

	1938-40	1940-42	1942-44	(1)
a)—de langue anglaise	18	62	94	97
b)—de langue française	13	54	104	114
TOTAUX	31	116	198	211

c)—Proportion 3.6% 12.3% 20.0%

(1) Sont entrés au service de Sa Majesté pour une période quelconque durant la phase du conflit 1938-44.

A titre de vétéran de la guerre 1914-18, permettez-moi de féliciter en votre nom ces 211 confrères qui ont servi dans nos forces armées et gardons une minute de silence pour ceux qui ont donné leur vie.

LONGÈTE DE PRATIQUES

Pratique-t-on bien longtemps la dentisterie dans cette province, ou en d'autres termes, combien de dentistes atteignent 20, 30, 40, 50 ans de pratique? Consultons, si vous le voulez bien, le tableau fait d'après la liste officielle des licenciés publiée par le Régistrateur en 1944. Il nous donnera la vraie réponse à nos prétentions personnelles de longévité.

De 1 à 5 ans de pratique	162 dentistes.
" 5 à 10 " " "	100 "
" 10 à 15 " " "	89 "
" 15 à 20 " " "	215 "
" 20 à 25 " " "	220 "
" 25 à 30 " " "	90 "
" 30 à 35 " " "	56 "
" 35 à 40 " " "	23 "
" 40 à 45 " " "	22 "
" 45 à 50 " " "	14 "
" 50 à 55 " " "	8 "
" 55 à 60 " " "	2 "
" 60 à 65 " " "	2 "

LEGENDE.

Pour terminer, vous trouverez sur ce tableau un bon nombre d'abréviations dans certaines colonnes. Elles ont leur signification respective sous la rubrique: "LEGENDE".

CONCLUSIONS:

1—La Profession dentaire est nullement encombrée dans cette province; au contraire, la moisson est abondante et les ouvriers manquent dans plusieurs comtés fort peuplés. Quelle sera alors notre situation quand l'Assurance-Santé viendra augmenter la demande de soins dentaires?

2—La répartition de la profession est considérablement inégale dans cette province, puisque 61.9% est concentrée dans un rayon de 15 milles carrés environ, avec une proportion du 1/3 de la population provinciale.

3—La crise du logement serait grandement réduite pour nos confrères, si le décongestionnement professionnel dentaire de la Métropole était fait, car il vaudrait beaucoup mieux être premier dans un centre régional que d'être le 563^{ème} dans une grande ville.

4—Plus nous serons imbus de science dentaire, plus il nous sera facile de faire admettre la nécessité de notre profession par les autorités médicales, gouvernementales et municipales; partant, la création de nouvelles cliniques dentaires s'imposerait d'elle-même avec la nomination de confrères attachés à ce service.

Ce rapport, bien incomplet, semble-t-il, vous est présenté avec un très grand soin apporté aux précisions. Puisse-t-il atteindre le but proposé? Si des erreurs se sont glissées, nous espérons que vous ne nous en voudrez pas trop, car nous y avons mis toute notre intelligence, beaucoup de temps et surtout de travail. Je remercie ceux qui, de près ou de loin, ont pu aider à la réalisation de ces statistiques.

Le Traitement de la Paradentose et ses Diverses Tendances

Par JULES THEBAUD, D.D.S., M.Sc.D., L.L.L., F.I.C.D.

III (suite)

Considérons maintenant une excellente tendance qui s'inspire des données vraiment scientifiques, celle qui consiste à suivre le cours du processus pathologique à travers une meilleure optique et à choisir un ou plusieurs modes de traitements susceptibles de donner des résultats appréciables. En plus de la rectification du traumatisme occlusal, de l'amélioration de l'hygiène buccale et de l'application de tous autres soins préparatoires, le choix d'une thérapeutique principale et d'autres thérapeutiques adjuvantes, c'est-à-dire la COMBINAISON DE PLUSIEURS MODES DE TRAITEMENTS, quand les cas l'exigent, nous permet d'atteindre les principaux buts visés dans la périodontie opératoire; puisque nos préoccupations consistent A REDUIRE LES MASSES GRANULEUSES, A FAIRE DISPARAITRE LES CLAPIERS et A RETABLIR L'EQUILIBRE PHYSIOLO-

GIQUE DES TISSUS DE SUPPORT, au niveau des bords alvéolaires et du ciment nécrosés.

En parlant de ces principes, il est facile d'évaluer les moyens que fournissent certaines méthodes quand elles sont employées seules, dans leur cadre unique, sans le concours d'aucune autre méthode accessoire.

Sans vouloir diriger une critique contre ces méthodes, faisons l'analyse suivante:

a) Que peuvent la radiothérapie, la diathermie et l'actinothérapie, malgré leur action stimulante, contre l'ostéolyse progressive et la fibrillation des éléments conjonctifs de la membrane périodentaire? Quelle peut-être la durée de l'amélioration apportée au flux circulatoire dans les papilles gingivales?

b) La méthode antiseptique dont le choix est limité uniquement à l'emploi d'un escharotique, à l'insufflation de

l'oxygène naissant, ou à l'usage d'un médicament spécifique, soit en application locale, soit en injection sous-muqueuse, atténuée considérablement la virulence des micro-organismes, au point d'en annuler les symbioses, mais en dehors d'une amélioration sensible qui permet parfois à la gencive de récupérer sa tonalité et sa teinte normales, que peut cette méthode contre la réduction des culs-de-sac et des grappes de mononucléaires, sièges de l'infection chronique dans le paradentium?

c) La Ionophorèse qui rend l'imprégnation des tissus internes si concluante, peut-elle, malgré son action bienfaisante, éliminer les éléments granuleux, le cément et les bords alvéolaires au stade nécrotique? Dans quelle mesure, peut-elle garantir la formation du néo-cément, le réattachement des fibres et l'élaboration d'un nouveau sillon ou creux gingival?

d) L'auto-vaccinothérapie et la vaccinothérapie en stock, polyvalente, ont le pouvoir de modifier non seulement la virulence de certaines bactéries, mais aussi leur comportement en conférant une immunité relative et passagère aux tissus gingivaux. Cependant, dans nombre de cas, son action est inopérante, parce que des espèces de bactéries, comme par exemple le fusiforme et le M. Gazogène n'entrent pas dans leur composition. Que peut, dans l'ensemble, l'action d'une telle thérapeutique dans l'élimination des tissus infectés et dans la régénération que nous cherchons?

e) Le traitement dit hygiénique ou conservateur qui consiste à pratiquer le détartrage et le polissage méticuleux ainsi que l'application d'un antiseptique léger donne de bons résultats au premier stade de la maladie, quand les culs-de-sac sont peu marqués. De même, l'emploi du superoxol et l'insufflation de l'oxygène sont d'un grand apport dans les paradentoses du premier degré, accompagnés de stase sanguine dans les bourrelets gingivaux. Mais, l'adoption unique de cette thérapeutique peut-elle supprimer les clapiers profonds et les tissus pathologiques si prompts à la récurrence?

f) L'emploi modéré des substances

chimico-coagulantes, sous forme de mèches, de pâte ou de ciment dans les clapiers élimine graduellement les éléments dégénérés au début de la désintégration du sillon gingival. A cette même phase le mélange au sulfure de sodium produit aussi une bonne réaction; mais le processus pathologique, à sa phase D'EVOLUTION CRITIQUE, ne répond aucunement à cette thérapeutique.

g) L'électro-coagulation si distincte de la thermo-mautérisation, puisqu'elle ne fait que coaguler les tissus qu'on désire éliminer, au lieu de les brûler, donne des résultats appréciables et permet de faire face aux buts visés: les tissus gingivaux hyperémiés, disparaissent avec une rapidité extrême, ainsi que les éléments qui forment la base des culs-de-sac. Cette méthode présente certains avantages, mais il serait osé d'avancer qu'elle peut être pratiquée dans tous les cas et à toutes les occasions, sans le secours de quelques autres moyens accessoires. Son pouvoir thérapeutique diminue en raison de la profondeur des clapiers, qui parfois dépassent le tiers gingival de la racine.

h) Poursuivant notre objectif qui consiste à éliminer les masses granuleuses, à réduire les culs-de-sacs et à combattre l'infection dans les tissus de support, pouvons-nous trouver dans la méthode chirurgicale un moyen de faire face à ces lésions pathologiques? La chirurgie répond bien au but que nous poursuivons, mais, malgré ses grands avantages, la méthode chirurgicale doit être combinée avec d'autres thérapeutiques adjuvantes de moindre importance technique. Cependant l'allure plus ou moins rapide de la résorption alvéolaire, peut être parfois ralentie, suivant le degré de perfection des rectifications apportées au traumatisme occlusal et aux autres causes locales; mais ce processus dégénératif échappe à notre contrôle absolu, vu qu'aucun moyen n'a été trouvé pour arrêter définitivement la dissolution des éléments osseux au niveau des maxillaires, c'est là le grand point d'interrogation, et la grande lacune à combler. . .

Cette lacune nous porte à espérer que les recherches en pathologie générale apporteront plus de lumière et plus de préci-

sion en établissant des tests capables de révéler dans une certaine mesure la spécificité ou l'action directe des causes constitutionnelles.

La théorie humorale est démentie par les hépatiques du dernier degré indemnes de lésions paradentaires; elle est en pleine déroute devant le spectacle des goutteux, qui ne présentent pas le moindre symptôme de la pyorrhée; et beaucoup d'autres arthritiques n'ont jamais souffert le moins du monde de la polyarthrite buccale ou paradentose.

L'emploi de l'acide nicotinique ou d'autres vitamines ainsi que la médication alcaline sont des thérapeutiques appliquées un peu à l'aveuglette qui ne répondent pas à des tests sûrs pratiqués dans le but de déterminer la nature des dyscrasies qui prédisposent aux paradentopathies.

Nous croyons dans l'espèce que le premier pas, qui doit être fait dans la thérapeutique de la paradentose en vue d'aider l'action du dentiste, c'est celui qui doit ÊTRE ENTREPRIS EN MÉDECINE GÉNÉRALE, le dentiste ayant à sa portée plusieurs moyens propres à traiter localement cette affection, suivant ses aspects cliniques et son degré d'évolution.

Nous ne pouvons que souhaiter l'innovation d'une telle tendance en médecine générale.

Il y a lieu de considérer, comme dans la pratique de l'orthodontie, l'opportunité d'instituer le traitement de la paradentose à une période favorable au succès de l'intervention. A ce sujet, rien ne vaut le dépistage des lésions paradentaires observées à leur phase de début; les corrections à apporter au désordre articulaire et le traitement des lésions du paradentium peuvent être échelonnés sur un certain nombre d'années, et les conditions systémiques qui favorisent ces paradentopathies sont plus facilement suivies par le médecin; tout cela constitue le grand mérite de ceux-là qui décèlent à temps les phases initiales de l'affection.

Certains professionnels consciencieux, s'ils n'entreprennent pas eux-mêmes le traitement à la phase de début, n'hésitent pas à référer les cas observés aux spécial-

istes en périodontie. Et c'est ainsi, que chaque année des millions de dents échappent au davier. Mais à côté de cette bonne politique professionnelle, on peut signaler actuellement *trois autres tendances*:

1° L'attitude de quelques professionnels, qui, par manque d'intérêt ou par indifférence ne font aucun effort pour déceler le mal, à temps.

2° L'attitude opiniâtre de quelques praticiens qui repoussent l'opportunité du traitement périodontique, même si l'occasion leur est offerte de traiter ou de conserver quelques dents de support pour la pose des prothèses partielles. Ce qui conduit à l'extraction totale, considérée comme seul moyen de guérison, et ce qui aboutit tout naturellement à la prothèse complète, qui souvent, par manque d'adaptation méticuleuse ne répond pas aux fonctions physiologiques des plans articulaires, ni aux mouvements de la trajectoire condylienne, et encore moins à l'esthétique; parce que l'objectif, dans ce cas, prend la forme D'UNE OBSESSION QUI SE RESUME A UNE AFFAIRE D'ARGENT; la science et l'art occupent ici une place inférieure aux préoccupations d'ordre fiscal.

3° Une autre tendance s'observe dans le cas des professionnels, qui sans la préparation scientifique si indispensable au périodontiste s'embarquent dans une aventure après s'être MUNIS D'UN APPAREIL OU DE LA ROUTINE D'UNE SEULE METHODE. A force de manipulations et d'attouchements, le polymicrobisme des culs-de-sac se trouve atténué, peu après les séances magistrales et les bons mots du praticien, la suggestion aidant chez le patient, la situation est jugée grandement améliorée jusqu'aux prochaines vagues de récurrence. . . Cette pratique, qui cause un tort considérable à la profession, fait penser à une situation qui pourrait être non moins chaotique, si tous les dentistes s'avaient de pratiquer l'orthodontie sous le couvert d'une seule méthode, sans une préparation adéquate.

Les soins du paradentium constituent un travail tellement minutieux en ce qui a trait au diagnostic à poser, aux traitements pré et post-opératoires, et au choix

des méthodes adéquates, qu'il paraît logique d'en confier l'exécution à des praticiens qui disposent de la préparation voulue et du temps nécessaire. Il est intéressant de noter qu'aux États-Unis, par exemple, la Société de Périodontologie est constamment en relation avec l'Association Dentaire Américaine à qui elle fournit, à titre de références, une liste des praticiens qui se consacrent à cette spécialité.

C'est donc une formule bien établie aujourd'hui aux États-Unis, dans les moeurs professionnels. Il s'agit ici d'un "Locus Regit Actum" qui est propre à ce pays, mais qui a tendance à s'imposer ailleurs. La pratique chez les Périodontistes est soumise à une telle discipline, que certaines autorités, comme Coolidge et Williams, par exemple, prescrivent, pour chaque cas à traiter, l'adoption d'un plan d'action bien défini. C'est ainsi que pour éviter des tâtonnements, il est recommandé avant de recourir à toute intervention, d'établir un diagnostic détaillé, afin de décider de l'opportunité d'éliminer toutes les causes locales et de choisir un traitement principal approprié, ainsi, que les thérapeutiques adjuvantes. C'est après ces préliminaires qu'on peut pronostiquer sur le succès de l'intervention et sur la restauration complète de la physiologie buccale.

(A Suivre)

Délégué de la W. K. Kellogg Foundation à l'Université

Vendredi, le 8 février, le docteur P. E. Blackerby, membre du comité d'enquêtes de la W. K. Kellogg Foundation est venu visiter officiellement la faculté de Chirurgie Dentaire de l'Université de Montréal.

On sait que cette organisation philanthropique vient en aide aux universités dont les revenus ne répondent pas à leurs besoins.

Le docteur Blackerby a visité en détail tous les services de notre faculté et est reparti enchanté de son contact avec les membres du personnel enseignant. L'Université fonde de grands espoirs de cette enquête.

Echos des Changements à l'Université Columbia

Depuis le 1^{er} juillet 1945, la faculté de Chirurgie Dentaire de l'Université Columbia de New York ("School of Dental and Oral Surgery") est incorporée dans la faculté de médecine.

Depuis cette date, l'Association des Anciens de la faculté de Chirurgie Dentaire de l'Université Columbia, les Sociétés Dentaires de l'Etat de New York, le Bureau des directeurs de l'Association Dentaire Américaine, la majorité des membres du personnel enseignant de la faculté de Chirurgie Dentaire de l'Université Columbia, le bureau des Examinateurs Dentaires de l'Etat de New York ont fait parvenir aux administrateurs de l'Université Columbia des votes de protestations contre cette mesure, qui met l'enseignement dentaire sous la tutelle de la faculté de médecine.

Comme conséquence immédiate de ce nouvel état de choses, le Bureau Dentaire de l'Etat du New Jersey vient de déclarer inéligible à l'examen pour la licence les diplômés de l'Université Columbia à partir du printemps de 1946.

Le Docteur George A. Morgan à la Société Dentaire

Le conférencier invité à la séance de février de la Société Dentaire de Montréal était le docteur George A. Morgan, exodontiste réputé de Toronto.

Le docteur Morgan a déroulé et commenté un film en couleurs, illustrant "mille et une façons de procéder en chirurgie buccal". Cet exposé du docteur Morgan fut des plus intéressantes et fort goûté de l'assistance exceptionnellement nombreuse.

A l'issue de la conférence, il y eut discussion élaborée sur la participation éventuelle de la province de Québec au Dominion Dental Council.

A cause de l'intérêt soulevé par cette question au sein de la profession, le président de la Société, le docteur Amherst Hébert, proposa de consacrer une séance spéciale à l'étude de ce problème.



PAGES EDITORIALES

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397 est Boul. S.-Joseph, Montréal

LA SECTION FRANCAISE DU JOURNAL DE L'ASSOCIATION DENTAIRE CANADIENNE

Depuis le début de son existence, il y a plus de dix ans, la section française de notre journal a toujours eu comme rédacteur, le docteur Alcide Thibaudeau, que tous ont connu, soit comme professeur érudit à l'Université, soit comme écrivain aux idées lucides et au style châtié à cette revue mensuelle.

Le docteur Thibaudeau, avec la livraison d'avril, cesse d'être le directeur des activités écrites de notre groupement professionnel canadien-français. Nul plus que son successeur regrette cette retraite d'un poste occupé si brillamment durant de nombreuses années; notre ancien rédacteur, avec des moyens limités mis à sa disposition, fit un travail remarquable, dont lui sauront gré les dentistes de notre province. Il fut l'initiateur, le défricheur dans ce domaine de la publication. La collaboration, sur laquelle un rédacteur doit compter, lui a souvent fait défaut et c'est souvent avec des prodiges d'habileté et de ressources, qu'il a réussi à maintenir le niveau scientifique de la section française de notre Journal.

La tâche du rédacteur n'est pas facile, surtout chez nous, où les nôtres n'écrivent pas ou peu. Nous n'en sommes pas encore au point de dire comme le docteur Harold Hillenbrand, rédacteur du "Journal of the American Dental Association", qui écrivait dans son Editorial de février 1946, en faisant une revue annuelle des activités de son Journal, qu'il reçoit trois fois trop de manuscrits pour remplir les pages de son organe.

Cependant, nous acceptons le poste de rédacteur de cette section française avec enthousiasme et confiance. Loin de nous chagriner et de montrer un visage long, en face de ce peu de coopération, nous commençons notre nouveau travail avec bonne humeur et le sourire aux lèvres.

Comme programme, nous ne pouvons faire mieux que de reproduire le rapport, que nous soumettions, à sa demande, au Bureau des Gouverneurs du Collège des Chirurgiens Dentistes, en février 1946.

Après avoir rencontré, à Toronto, les dirigeants de l'Association Dentaire Canadienne et le Comité chargé de la publication du Journal, nous sommes émerveillé du travail accompli par notre Association et convaincu de la collaboration sincère et dévoué de nos confrères de langue anglaise.

JOURNAL DE L'ASSOCIATION DENTAIRE CANADIENNE

(section française)

EDITORIAL

Toute revue scientifique, d'un caractère professionnel, présente à ses lecteurs, à chaque livraison, un article d'intérêt général, traitant de questions d'actualité et d'organisation professionnelle.

Le journal de l'Association Dentaire Canadienne est le seul médium d'expression du groupe dentaire de langue française: ce journal devrait offrir régulièrement à ses abonnés, dont l'idéal est le même, des mots d'ordre, des directives et des commentaires sur des questions de bien-être matériel et scientifique de toute la profession.

Cet éditorial ne devrait pas nécessairement émaner du rédacteur de la Revue: les présidents de groupes dentaires font part à leurs confrères d'idées susceptibles d'améliorer leur rendement professionnel.

ARTICLES ORIGINAUX

Notre journal peut offrir, tous les mois, deux articles originaux, écrits par des confrères de notre province. Ces communications scientifiques peuvent être obtenues facilement de différentes sources: des congrès, des sociétés dentaires, de l'université, de revues étrangères et d'individus, qui font part à leurs confrères du résultat de leur expérience personnelle et de leurs lectures.

1—*Congrès*—Les nombreux travaux présentés à ces réunions scientifiques peuvent alimenter les pages de la section française. Les revues analogues à la nôtre, comme le Journal of The American Dental Association, sont remplies de communications présentées à divers congrès. La publication de ces rapports est utile aux confrères qui n'ont pas assisté à ces réunions et sert d'aide-mémoire aux congressistes.

2—*Sociétés dentaires*—Ces sociétés locales ont, en général, des réunions tous les mois et des conférenciers présentent des travaux, qui peuvent être reproduits dans notre journal. Le Comité de Rédaction de la Revue doit obtenir des auteurs eux-mêmes ou des secrétaires des sociétés, une copie de ces conférences.

3—*Université*—Une faculté de chirurgie dentaire est un centre scientifique d'où rayonnent les connaissances approfondies, du domaine théorique et pratique. Les cours donnés aux élèves et les cours de perfectionnement offerts aux praticiens sont des sources inestimables de matériel de publication.

Les élèves eux-mêmes présentent à leurs confrères-étudiants des travaux parfois remarquables et souvent dignes d'être publiés.

De plus, les finissants préparent ou prépareront des thèses de doctorat intéressantes pour toute la profession. Voilà encore une veine précieuse de substance à publication.

4—*Revues étrangères*—Souvent, des revues étrangères publient des communications intéressantes, qui méritent d'être reproduites "in extenso". Les lecteurs de la section française du Journal de l'Association Dentaire Canadienne liraient avec intérêt ces articles, que le comité de Rédaction pourrait traduire et publier à leur intention.

5—*Individus*—Le comité doit susciter toute la collaboration possible chez les membres de l'Association pour l'élaboration d'articles scientifiques. Cette participation doit être encouragée avec tact et sympathie. Le comité doit disposer et offrir toute l'assistance nécessaire à la rédaction de ces communications: facilité de bibliographie, de copie, de préparation de clichés, etc.

N.B.—Les articles originaux, pour être plus vivants, plus clairs, plus instructifs doivent être émaillés de photographies et de dessins. L'intérêt de la littérature dentaire demande des illustrations c.f. Dental Digest.

REVUE DES REVUES

La plupart des revues scientifiques offrent à leurs lecteurs des résumés succincts d'articles intéressants parus dans d'autres revues. Il est normal qu'un praticien n'en puisse lire beaucoup, à notre époque d'activité fébrile et de publicité à outrance. Notre Journal, se doit d'avoir une section destinée aux résumés d'articles parus dans différentes revues. Ces résumés seraient faits par des membres de notre profession et leur travail pourrait être rémunéré à un tarif nominal.

PHOTOS DES AUTEURS

Pour satisfaire le désir naturel de publicité d'un confrère, qui s'impose la rédaction d'une communication, sa photographie devrait être jointe à son article. On se plaint, d'une façon générale, de la carence de collaboration à la revue: tout devrait être mis en oeuvre pour attirer cette coopération tant désirée.

La communication prend aussi plus d'intérêt.

REMERCIEMENTS AUX AUTEURS

L'auteur d'un travail publié dans notre Journal a droit à un mot de félicitations et de remerciements du Comité de Rédaction. Les gestes de cette nature font plaisir à ceux qui en sont l'objet et tendent à resserrer les liens de sympathie et de compréhension.

SECTION ANGLAISE

Le comité de rédaction de la section française devrait faire part à tous les membres de l'Association Dentaire Canadienne des initiatives et des activités du groupement professionnel français. La rubrique "News of the Provinces" annonce rarement des rapports des organisations françaises. Aux yeux de nos confrères de langue anglaise, les dentistes canadiens-français semblent ne pas exister puisque les pages destinées à relater leur vie professionnelle restent blanches, la plupart du temps.

TABLE DES MATIERES

Notre section française est actuellement mal représentée dans cette page, placée au début du journal. Les noms d'auteurs n'y apparaissent pas et enlèvent aux articles une partie de leur intérêt.

PUBLICITE

Notre journal est bilingue c'est-à-dire qu'il est écrit par des dentistes, dans les deux langues officielles du pays et qu'il est lu par tous les dentistes du Canada. Nous devrions faire pression auprès des annonceurs pour que leurs réclames paraissent parfois en français pour conserver à notre organe son caractère bilingue. Actuellement les annonces libellées en langue anglaise donnent à la Revue un aspect unilingue ou anglais.

NOMBRE DE PAGES DE LA SECTION FRANCAISE

Le nombre de pages consacrées au français ne peut être rigoureusement le même tous les mois. Il devrait varier selon la matière à publier avec un minimum de douze pages et éviterait l'interruption d'un article pour le continuer au prochain numéro. Cette pratique enlève l'intérêt de la lecture.

NOUVELLES

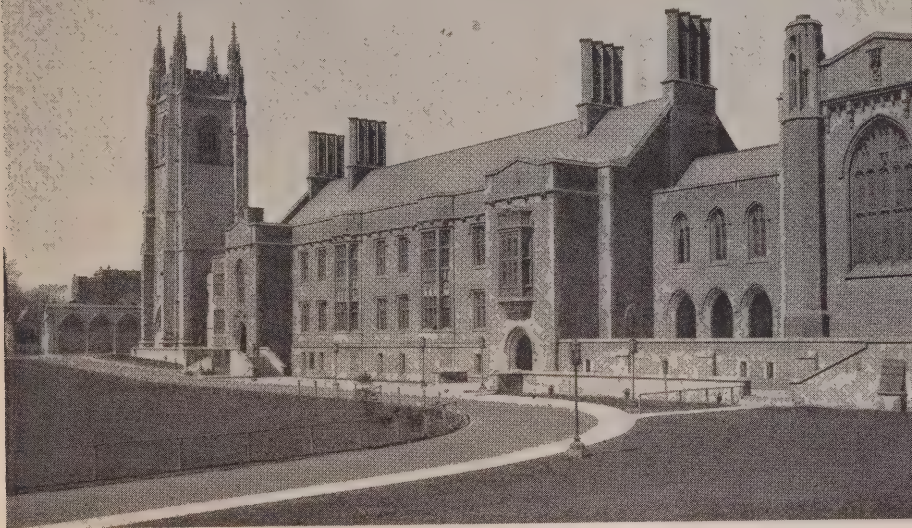
Des journaux ou des revues d'intérêt général publient souvent des nouvelles qui intéressent particulièrement la profession dentaire. Des revues, comme le Time ou le Newsweek font part à leurs lecteurs de faits ou d'épisodes, qui regardent spécialement les dentistes.

Le Comité de Rédaction devrait reproduire ces nouvelles et tenir ses abonnés au courant des événements dentaires, qui intéressent les profanes et à plus forte raison, les dentistes.

BOITE AUX QUESTIONS

Nouvelle section à organiser. Les confrères seront invités à soumettre leurs problèmes de pratique, avec radiographies et dossier complet. Les questions seront répondues par des spécialistes, dont les réponses apparaîtront dans le Journal.

GERARD DE MONTIGNY.



HART HOUSE, UNIVERSITY OF TORONTO
Scene of Convention "Home Coming Reception"

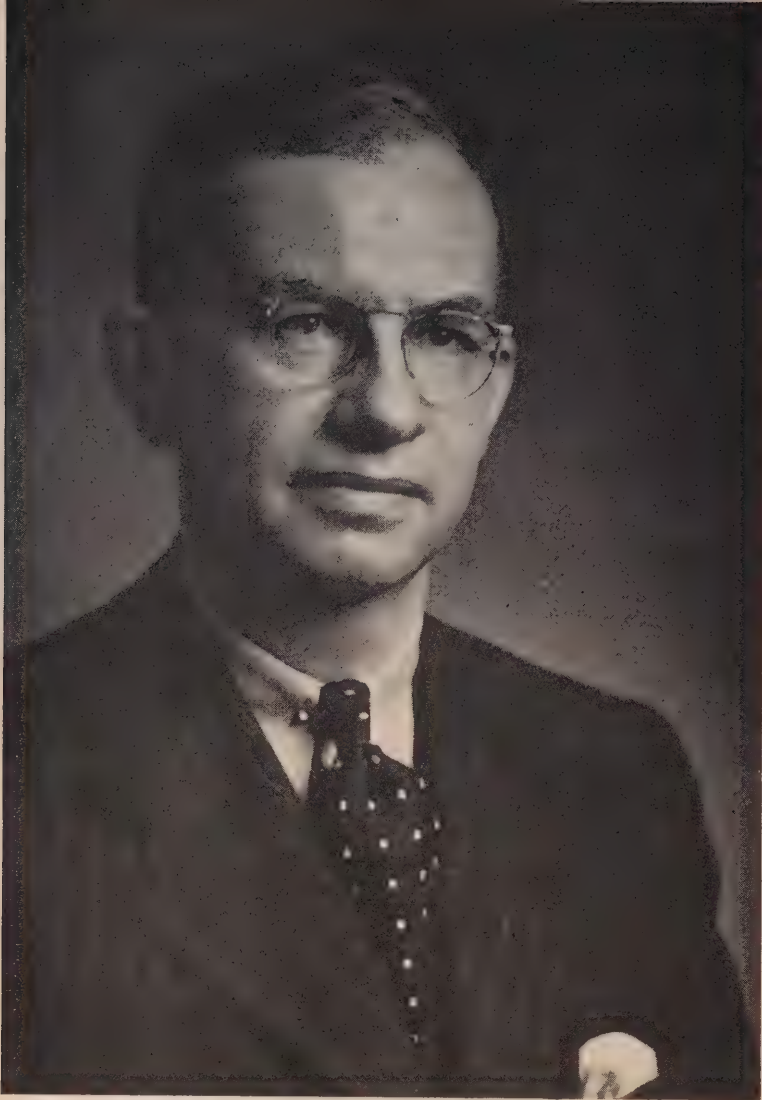
NATIONAL CONVENTION OF CANADIAN DENTISTS

Hart House Reception

TUESDAY, MAY 28 AT 8 P.M.

1. *A Reception* in the Quadrangle of Hart House at 8 p.m. when the guests will be received by the President of the University, Dr. Sidney Smith and Mrs. Smith; President of the Canadian Dental Association, Dr. Harvey Reid and Mrs. Reid; President of the Ontario Dental Association, Dr. Frank Martin and Mrs. Martin and Dr. John A. Bothwell, President of the Dental Alumni and Mrs. Bothwell. The Carillon will play during the reception from 8 until 9 o'clock.
2. *In the Theatre*—The Leslie Bell Singers, *Chorus & Solos*. Miss Muriel Kilby, *Marimbist*. Mr. Fred Manning, *Humorist*.
3. *In the Swimming Pool*—"The Ornamental Swimmers."
4. *In the Gym*—Dancing with Frank Bogart's Orchestra.
5. *A Buffet Supper* will be served in the Great Hall at 10:30 P.M.

JOHN A. BOTHWELL
Chairman of Arrangements.



Photograph by Karsh

HONOURABLE BROOKE CLAXTON,
Minister of National Health and Welfare.

The Journal

OF THE CANADIAN DENTAL ASSOCIATION

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NO. 5

DENTAL TREATMENT FOR VETERANS

by LESLIE G. ROBINSON, D.D.S., New Westminster, B.C.

THE return of service men and women to their homes presents to our profession problems that should receive full and immediate consideration. The first groups of fighting men who returned aroused tremendous enthusiasm, and the population generally experienced, and expressed, a sense of deep gratitude to them. Elaborate welcomes were given, and much was said and written about our duties in welcoming them back to civilian life, and in giving our assistance to plans for their rehabilitation. As more and more of the men return, it has become a common experience to see uniforms bearing ribbons which show evidence of active service; to meet many men and women who have served in the various branches of the forces, and to see the increasing number of service badges on civilian lapels.

As always, familiarity produces an apathetic reaction to enthusiasm, and, it seems, the greater the original enthusiasm, the greater the subsequent apathy.

Dentists of Canada who have remained in civilian practice throughout the war have suffered little. There has been some mild grumbling about gas rationing, and tire shortages, among other smaller grievances. In general, practices have grown far beyond the saturation point. In such circumstances, it seems to be a fact that many

members of our profession, and probably those of most other occupations, as well, develop a sort of "selective service". The cream of the work is sought, and resentment is sometimes felt at the necessity of accepting duties that do not produce the highest financial returns.

Consideration of these facts should bring us to the point where we will recognize and accept a duty evolving upon us as a result of the liberation of thousands of service people who have not received full dental attention. The Dental Corps has given magnificent service, during the war and after, but has been unable to cope with the tremendous quantity of work required to be done, so that each service man and woman may be rendered dentally fit upon, or after discharge. After discharge, continuing dental services are in the hands of the Department of Veteran's Affairs, and the District Supervising Dental officers at various centres throughout Canada have the thankless task of allocating the treatment of discharged veterans to civilian dentists.

As should be generally known, originally the veteran was requested to secure the name of some dentist who would undertake his treatment, inserting that name on his application form and forwarding the form to Ottawa. Later in 1945, the system changed. Since then the Dental Corps prepares a chart for the veteran, at the time of

his discharge. This chart is sent to the appropriate District Supervising Officer of the Department of Veteran's Affairs whose duty it is to assign the treatment to a civilian dentist. To assist in the re-establishment of dentists who served with the forces, and who are being discharged from the Dental Corps, these cases are to be assigned to them, wherever possible. It was very soon discovered that in general such men are finding no difficulty in establishing themselves in practice, and they cannot possibly handle the thousands of DVA cases available to them. Civilian dentists have been asked to accept a share of these cases, but, particularly in some localities, the response has not been enthusiastic.

One Supervising Officer of the DVA has assured the writer that he has thousands of cases to be assigned, but often has difficulty, in certain localities, in getting civilian dentists to undertake the work, because of the low fees involved, or, perhaps, simply because their appointment books are more than filled with the names of good paying patients. Considering that the unusual general wealth of such patients exists largely because of the sacrifices of the men who carried on our battles overseas, the situation seems somewhat of an anachronism.

For the most part, men and women discharged from the services are excellent patients who have a well-developed appreciation of dental care. The advantage of serving this class of people cannot be denied. They are not overly sensitive, and occasional moments of conversation during the course of treatments may be more than interesting. Some of them may have ridden a Liberator over Germany through plenty of flack and fighter defense; some may have been on the Atlantic patrol or on Murmansk convoy duty on a corvette, or perhaps just foot slogging it through Italy or Holland or Germany, where conditions of climate and health were not the most salubrious. Their jobs were done at a rate of pay that was

somewhat inadequate, too—a bit more inadequate than the scale of fees laid down for dental services under the Department of Veterans Affairs. Everything considered, they are, as a whole, a fine type of patient. They deserve our best attention in the way of dental services, and certainly some priority over the work of civilians who remained at home with much greater comfort, no risk, and generally much augmented incomes. Incidentally, although it may seem incredible, instances have been recorded of civilian dentists demanding that the service man or woman pay the difference between the fees allowed by the Department, and his normal scale of fees. This is permissible and understandable when extra services are agreed upon; when the patient desires a more costly type of restoration than that allowed by the Department, and is able to pay for it, but otherwise it seems hardly in keeping with our often expressed appreciation of their services and sacrifices.

If we elect to do veterans work—our fair share of what is required to be done—perhaps some of our civilian patients may be annoyed at having their appointments delayed a bit longer, but if a candid explanation is given, it seems unlikely that we shall lose any patients of a particularly valuable type. As a general rule, dental files for veterans may be expected to reach the centres of allocation some three to six months after examination. Just why that is so is another question, but the fact remains. In the meantime, complications often develop. It is urgent that prompt attention be given as soon as possible after the file is available, and it is difficult to understand why civilian patients who have had access to regular care should object to some little delay while their dentist gives some time to such urgent cases.

Perhaps we may have our waiting rooms occupied, occasionally, with men in working clothes, who might give offense to fastidious patients, and

who might seem to lower the standard of some high grade clientele. Perhaps we may run across a few patients with names ending in "ovitchs" or "oskys", and there may even be a few "Judy O'Grady's" mixed among the "Colonel's ladies" If so, for the Supervisor of Dental Service can be no respecter of persons or practices, we can, perhaps, give up one or two half days a week to that type of patient. As an example of how such periods work out, one may quote a practice that has existed among the dentists in the City of New Westminster for some time. When, during war years, all dental offices became filled to overflowing with work, it was found that many patients suffering extreme discomfort or pain were being turned away from door after door, and were often forced to return home without relief. It was agreed among the practising dentists of the city that, while these unusual conditions existed, each would set aside one period a week, during which no one in pain would be turned away from his office without relief. During that period, other dentists could refer emergency patients to him for attention. It requires little imagination to envision the type of patients that presented themselves occasionally, in offices accustomed to well appointed individuals. At any rate, if it is feared that some of the run-of-the-mine DVA cases may offend the sensibilities of some of our patients, it is surely possible in some manner to control the situation without much difficulty.

Even from a purely materialistic

viewpoint, the dentist who undertakes his share of DVA work may not do too badly. If his fees are materially lowered, at least he does not worry about whether or not he will collect them. Most of the DVA patients are very easy to work for, and it will be found that a greater volume of work may be completed in a given time than with the average run of patients. As a matter of fact, also from the material point of view, doesn't each one of us who remained at home owe these individuals more than he could ever repay if he worked for them for years without any fees at all?

Another factor seems worthy of consideration in that one of the first important contacts made by the veteran, upon returning to civilian life, is with the dentist. These men and women have acquired an appreciation of dental services, and most of them are anxious to avail themselves of the opportunity to have their dental needs given attention. Because of that early contact with the service man we may find another duty. The veteran is often physically affected as a result of service; almost certainly there will be a psychological upset, or disturbance, to a greater or lesser degree. Perhaps we cannot help them to secure work or a place in which to live, but at least we can give sympathetic hearing and consideration to their description of successes or failures in rehabilitation, and perhaps in some manner or other the opportunity may come to repay a little of what we owe to them.

ANNOUNCEMENT

Convention of New Brunswick Dental Association

The 51st Annual Convention of the New Brunswick Dental Society will be held at the Admiral Beatty Hotel Saint John, N.B., September 16 and 17—Dr. S. K. Wetmore, Sec., 147 Germain St., Saint John, N.B.

Convention of Eastern Ontario Dental Association

This Convention will be held in the Chateau Laurier Hotel, Ottawa, on September 22, 23, 24, 1946.

ANNOUNCEMENTS

Western Canada Dental Society

This Society will hold its biennial convention at the Banff Springs Hotel, Banff, Alberta, June 12—15, 1947.

Class Re-unions at Toronto

The following classes are having re-union parties during the National Convention of Canadian dentists at the King Edward Hotel in Toronto on Monday evening, May 27.

Class members should contact their class representatives as follows:

- Class 2 T 1 Roy Kerr, 633 Danforth Avenue, Toronto
- Class 2 T 6 A. J. Vince, 648 Danforth Avenue, Toronto
- Class 1 T 6 H. R. Conway, 421 St. Clements Avenue, Toronto
- Class 3 T 6 S. C. Shumacker, 380a Bloor Street W., Toronto
- Class 2 T 3 Jesse Fullerton, 2 College Street, Toronto

Laboratories Convention

The Dental Laboratories Association of Ontario will hold its Third Annual Convention at the Royal York Hotel, Toronto, on May 25, 26 and 27.

In addition to the usual good program, clinics, and entertainment, there will be an extremely interesting business meeting.

Fellowships in Dentistry

The school of Dental and Oral Surgery of the Faculty of Medicine, Columbia University, announces the establishment of a limited number of fellowships for graduates of dental schools. These fellowships will offer opportunity for study in the following basic science departments of the University: Anatomy, Bacteriology, Biochemistry, Pathology, Pharmacology, Physiology.

For further information regarding qualifications and stipend, address the Dean of the Faculty of Medicine, Columbia University, 630 West 168th Street, New York City.

Postgraduate Course in Anaesthesia, Dental, and Oral Surgery

Director, JOHN H. GUNTER, D.D.S., M.D.
at the Thomas W. Evans Museum and Dental Institute
School of Dentistry, Univ. of Pennsylvania.

The subject matter covered will include diagnosis, x-ray interpretation, pre- and post-operative management of surgical cases, gingivectomy, alveolectomy, root resection, the surgery associated with immediate denture insertion, oral tumours, surgical infections associated with the teeth and jaw bones, the technique of tooth removal including impactions and antral involvement. The work will be both didactic and clinical. Emphasis will be on practical applications.

The course will extend over a period of 1 week for a total of 38 hours. Classes will meet from 9 a.m. to 5 p.m. Monday through Friday and from 9 a.m. to 12 p.m. Saturday. Classes will start June 3, 1946. The course is offered to a limited number of dentists: Minimum of 8 and maximum of 12.

Fee for the course will be \$150., \$25. of which should be sent with the application not later than May, 20, 1946.

For further information address the Dean of the Dental School, 4001 Spruce Street, Philadelphia 4, Pennsylvania.

Conference in Dental Medicine

The third of a series of conferences in Dental Medicine will be held in the Gearhart Hotel at Gearhart on the Oregon Coast, 75 miles west of Portland by automobile or bus. The conference begins June 16 in the afternoon and continues through June 20. Dr. Lester W. Burket, D.D.S., M.D., and Dr. Douglas Campbell, M.D., M.R.C.P. have been engaged as instructors.

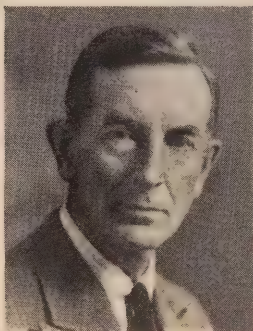
HENRY G. STOFFE., Sec. Northwest Conference Dental Medicine
4036 N.E. Sandy Blvd., Portland, 13, Oregon

NATIONAL CONVENTION OF CANADIAN DENTISTS

SOME OF THE ESSAYISTS AND CLINICIANS



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D.D.S.
Halifax, N.S.



WILLIAM BOYD
M.D., F.R.C.P., (Lond.)
Dept. of Pathology,
Banting Institute,
Toronto



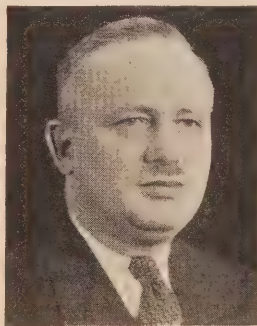
WALLACE GRAHAM
M.D., D.D.S., M.R.C.P., (Lond.)
Toronto



J. STANLEY BAGNALL
D.D.S.,
Halifax, N.S.



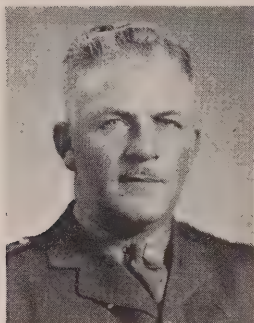
C. H. M. WILLIAMS
D.D.S., B.Sc., (Dent.)
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STUART D. GORDON
M.B., F.R.C.S., (c)
M.S., (T) F.A.C.S.
Toronto

NATIONAL CONVENTION OF CANADIAN DENTISTS

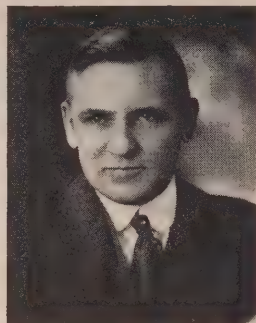
SOME OF THE ESSAYISTS AND CLINICIANS



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D.D.S.,
Montreal, Que.



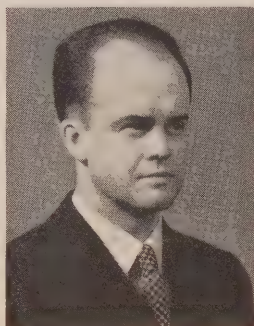
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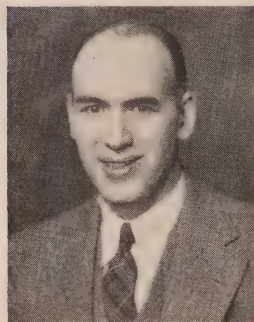
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C. D. HUSBAND
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Red Deer, Alta.



G. H. CHUDLEIGH
D.D.S.,
Halifax, N.S.



R. R. McINTYRE
D.D.S.,
Calgary, Alta.

The Forum

THE AETIOLOGY OF VINCENT'S GINGIVITIS

by SQUADRON LEADER A. C. WILKIE, H.D.D. (R.C.S. Edin), B.D.S.
(N.U. Irel.) Royal Air Force (Dental Branch)

Summary of paper in Dental Items of Interest, Jan., 1946.

(1) It was not possible to infect a human control with exudate from active fusospirillary lesions.

(2) Some evidence was obtained for the theory that repeated or protracted infection is necessary before pathogenicity manifests itself.

(3) Urinary excretion of vitamin C was found to be slightly less in infected than in non-infected individuals. This observation corresponds with findings in other infections.

(4) Administration of vitamin C was found to be beneficial in cases shown to be deficient, due to its effect on physiological repair.

(5) Some cases may be influenced

either as regards infection, or course of the disease, by a deficiency of vitamin A.

(6) Nicotinic acid deficiency is not a common predisposing factor.

(7) Infection by the herpes febrilis virus does not impart increased susceptibility.

(8) Salivary pH in cases of acute ulcerative gingivitis and stomatitis is slightly decreased and the range is slightly increased. The degree of change corresponds to findings in other diseases.

(9) Decrease in salivary pH does not contribute toward predisposition to infection; the organisms concerned probably being microaerophilic.

THE SOCIAL IMPLICATIONS OF THE PROBLEM

by J. J. Nevin, Editor of Tic Magazine

Legislation follows trends in public opinion; it does not stop them. If the majority of people believe that the welfare of its citizens is the concern of the State, the opposition of minority groups will not prevail long.

In a period when some form of health insurance seems inevitable, there must be more constructive planning by the health services.

If dentistry is to be given proper recognition in future programs, dentists must prove how much dentistry is necessary to health.

Most dentists agree that in a compulsory health program, children should be the first recipients of dental care,

but consideration must be given the productive adult population.

Experience with health insurance in England would indicate that better dental service is rendered in clinics than by private practitioners because the low fees allowed discourage the best work by the individual in private practice.

There is a growing appreciation by the public of the value of dentistry. With planned action by dentists this can make compulsory health insurance an opportunity for dentistry to establish itself. No good can come from indifference to this important problem and unwillingness to anticipate it.

FOURTEEN SLOGANS FOR CREDIT BUREAU USE

by LLOYD H. DODD—Illinois Dental Journal

1. "Call first—charge afterwards—it pays."
2. "An ounce of investigation is worth a pound of collection."
3. "Before you charge—investigate."
4. "A man's judgment is no better than his information."
5. "Time—it only takes a few minutes to get a report, but if you take on a patient who is a bad risk, it will take months to collect."
6. "An account properly opened is half collected."
7. "Carelessness in extending credit is the graveyard of many a practice."
8. "Credit Bureau service is the best investment you can make."
9. "The more you call, the more you save."
10. "Call for a report on every credit applicant."
11. "Get the habit—call first—charge afterwards."
12. "Too often 'Charge it, please' means 'I'll pay when I please'."
13. "Learn to say 'No'."
14. "A woman's curiosity is excelled only by that of a dentist who wants to try out a man just once to see if he will pay him when he does not pay others."

IN OUR OPINION*Reported from Greater N.Y. Dental Meeting in Jour. of 2nd Dist. D. Soc.*

KOCHER said we could handle twenty patients per day in a well organized office where the dentist is not called away from his chair. Patients for emergency treatment can be handled five minutes before the hour and he now does some of that work by devoting some of his one and one half hour lunch period to it. He said that a man is not honest with himself if his fees are too low. He made a good point when he said that the cost of maintaining a dental office should fall between 35% and 42%. Many men were interested in that answer. He also stated that it is advisable to refer to patients of long standing as earlier patients not "old" patients.

Kohrman, in his droll fashion, took a crack at the "mucostatic" impression—he called it a fifty-cent word. He said that after all is said and done we will all go back to taking impressions under pressure. He said that teeth when returned by the technician

are not finished. Then the dentist must start grinding them in. He disapproved of the mathematical way of opening the bite. He does it by observation. In his opinion the young men open the bite too much and the old men not enough. His results are more than observation, they come through experience with his work.

He should like to use acrylic teeth on acrylic dentures because he approves of one material throughout. He does not like any of the acrylic teeth manufactured but looks for improvement in the future. Porcelain teeth will be as passé as an iron heel on shoes or rubber tires which years ago could not carry the car to Yonkers without a blowout. As bad as acrylic teeth are today they are better than porcelain. He cited as proof that when once you use acrylic teeth the patient will protest going back to porcelain. It just can't be done!

—L. K.

Broadly speaking, there are only two classes of people in the world: those who wish to do as they like with themselves, and those who wish to do as they like with others.

—William J. Robins, in *Medley*.

HOW CAN DENTISTRY AVERT A POSTWAR DEPRESSION?

Symposium from the Pennsylvania State Dental Journal

The viewpoint of an Economist, by JAMES ROBINSON, Chicago, Sales Manager Thos. J. Dee and Co.

Condensed from Dentistry, Nov. 1945.

Dentistry should begin now to establish dental health in the minds of the people as a part of National Health.

The dentist's biggest competitors for the public's dollars are the luxury trades. Knowing this, why not prepare dental patients now for lifetime consideration of their general health of which dentistry is such a vital part.

It may be impossible to keep up with the velocity and volume of dental disease but dentists are not well equipped to come within striking distance of it now. Consider these facts:

More than 50% of the dentists in this country have no office help at all.

More than 60% have a 1-chair office.

How can enough dentistry be produced with a set up like that?

How much more dentistry would be produced if every dentist had at least 2 chairs and at least 1 employee? What if each dentist employed a dental hygienist in addition to an assistant? There would be far less

emphasis placed upon any possible need for socialized medicine if dentistry was producing nearer to capacity.

Much of the public relations work done by organized dentistry has been designed and pointed at the adult earner. More weight should be thrown into the public schools not only through dental hygienists but directly to every teacher through the medium of approved dental literature for distribution and classroom discussion.

Another thing—dentistry has never sold itself to medicine. Local dental and medical societies should meet together at least once a year. Dental literature designed especially for physicians should be fed to them.

A dental hygienist should be assigned to every hospital. This is one way to focus the light on dentistry as part of the general health plan. Thousands of medical patients would be awakened to dentistry every day and so would many physicians, surgeons, and nurses.

DENTAL NEEDS, DENTAL DEMANDS AND DENTAL COSTS

by M. L. DOLLAR, B.S.

Condensed from Ill. D. Jour, March, 1946

Dental costs are the second part of the trinity of dental economics: need, cost and demand.

In spite of all the hazards in establishing costs, the fact that the findings of several studies regarding costs have been in fairly close agreement adds confidence that these estimates are reasonably close to the truth. Peter T. Swanish, in a study of workers in selected industrial plants in Chicago, found that it would cost about \$52.47 to rehabilitate the mouth of the average worker. The Committee on Economics of the American Dental Association in a study of a selected sample

of adult dental patients in the office of a private practitioner found that the cost of restoring the mouths of the patients was \$48.96 for the average man and \$45.43 for the average woman. Dorothy Fahs Beck in a study of a sample of adult clinic patients found that it cost about \$52.66 to restore the patient's mouth. Beck found also that the cost of maintaining the average mouth in a healthful condition is about \$10.05 annually.

I would guess that the cost of initial care for children under 15 years of age would be about \$15. Maintenance care for this would probably be about \$8

per year. These figures are exclusive of orthodontia.

On the basis of these figures it is interesting to estimate the cost of providing dental care to the entire population. If the rounder figure of \$50 for initial care for adults were accepted as a basis for estimation, the total cost of meeting the accumulated dental needs for the approximately 100,000,000 adults in the United States would be approximately 5 billion dollars or about ten times the amount spent by the American Public for all its dental care during the year 1940. If this initial care was received at once, which obviously is impossible, it would cost approximately 1 billion dollars annually thereafter to maintain the dental health of the adult public. Initial care for the approximate 27,000,000 children between the ages of 3—14 years would cost approximately 405 million dollars and maintenance care for this group after initial needs were met would cost about \$216,000,000 per year.

In order to liquidate in one year the entire accumulation of dental need among both children and adults would require, according to rough estimates, from eight to ten times the present number of dentists.

Too little attention has been given to this third dimension of the dental problem potential demand.

Among the indigents in certain areas where dental services are readily available without charge, the rate of utilization is always far below need. Similarly among the upper income group where the cost of dental care is not a limiting factor the demand for care is still considerably below the need. The answer to the question, "Why do these groups not take advantage of the facilities so readily available to them?" is found, for the most part, in the lack of dental health education. We have not yet succeeded in developing a proper appreciation of the importance of dental health. We have not succeeded in persuading the public to assign the proper value to dental care as compared with other claims on one's time. We have not understood clearly that health education must be aimed not only at imparting knowledge, but also at the formation of habits of seeking care at regular intervals. Mere knowledge of the importance of dental health will not automatically result in action. If we are to create demand for dental service that will approximate need we must approach the problem through childhood training and through psychological appeal to adults based on advertising techniques now so effectively utilized in marketing commercial services and products.

February Issue 1945

We have a demand for the above issue of the *Journal of the Canadian Dental Association* and our supply is exhausted. It would be most acceptable if any of our members who are not saving complete volumes would forward this issue to us.

SECRETARY, Canadian Dental Association, 211 Huron St., Toronto.

In the age of the atom bomb, horse-and-buggy government is not merely an anachronism: it is a crime. To deprive government of the powerful tool of scientific method in reorganizing human relations, through law, administration, and cooperative social organization, would indeed condemn human society to remain in an "endless frontier" of force and chaos.

—Ward Shepard in *Science*.



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Editorial

DENTAL SERVICE FOR WAR VETERANS

In this issue of the Journal appear two articles of more than passing interest, one a letter by Col. W. W. Wright of Winnipeg, Manitoba, the other a paper by Dr. Robinson of New Westminster, British Columbia, both dealing with dental service for veterans. Col. Wright points out that dental service for veterans should be reserved, without question, for veteran dentists of this war in order to help them reestablish themselves. Dr. Robinson states that veteran dentists are finding it impossible to handle the thousands of D.V.A. cases available to them and that civilian dentists who have been asked to accept a share of these cases do so reluctantly in some localities, at least, because their appointment book is filled up with civilian patients who pay fees higher than the army standard. He urges that some priority be given to these war veterans by civilian dentists, urging the dentist to cooperate and pointing out the justice of this and how the problem might, in part, be handled.

These contradictory statements require some consideration. It is the considered opinion of this writer that while the dentist who gave up his practice to serve his country is deserving of every reasonable consideration and should be assisted in every way possible, it is also important that the veteran of other services who also gave up business and home relationships and served his country in actual combat, deserves every reasonable consideration.

A study of the present situation reveals that veteran dentists, as Dr. Robinson points out, have more cases than they can possibly handle. At the time of writing, early in April, information is not available from all the D.V.A. Districts but the following will give a comprehensive picture of existing conditions. There are unauthorized applications for dental treatment in various D.V.A. centres as follows:—Vancouver, 13,000; Calgary, 3,600; Edmonton, Regina, Saskatoon, (?); Winnipeg, 12,000; London, 7,500; Hamilton 3,800; Ottawa, 3,700; Kingston, (?); Toronto, 13,600; Montreal, 16,200; Quebec City, (?); Saint John, N.B. (?); Halifax, 9,200. Thanks to the kind cooperation of Dr. D. D. Wilson, Chief, Division of Dental Services at Ottawa, the following figures are available. At present in Head Office there are 350,000 dental examination charts. Of these 35,000 were completed prior to discharge and about 140,000 veterans did not make application within the 90 day period, which leaves 175,000 cases to be dealt with. The present daily output from this office ranges from 4,500 to 5,300, (one case for every dentist in Canada). In the next 6 or 8 months approximately another 150,000 charts will be received. The number of charts received at Headquarters prior to August 1945, was 250,000. The number received since August is 452,457 and the number yet to come is 150,000 making a grand total of 850,000, (about 200 cases for every dentist in Canada). Dr. Wilson points out that at the present time the problem is not one of distributing the work, but that the volume presenting itself is in excess of that which the civilian dentists, limited in number, are able to cope with in a reasonable period. Dr. Logan, District Supervisor at Halifax who has 9,200 unauthorized cases on hand and with a few thousand still to come, states that in April and for successive months he expects to issue 2,000 cases a month, which in his opinion, is above the saturation point for the dental profession of that province. Dr. Logan points out that there are only 150 active dental practitioners in Nova Scotia and that 2,000 cases a month means about \$80,000 worth of dentistry. At this centre, 50% of the veterans have no particular preference as to choice of dentist so returned dentists have all the work they can do. The veteran who expresses a preference is referred to his own dentist and this is as it should be. Dr. Addinell, Supervisor at Edmonton keeps track of all dentists commencing practice in his vicinity and makes sure that each has 100 charts with which to start.

The general opinion is that ex-officers of the Dental Corps are very cooperative and are anxious to secure these assignments, at least at first. As the saturation point is reached, as the dentist makes or resumes civilian contacts and in districts where the civilian fees are definitely higher than the D.V.A. fees an increasing number of practitioners are exhibiting a preference for civilian practice. On the other hand, Dr. Addinell of Edmonton states that many dentists in this District prefer to work under the conditions as set up by the Department in preference to civilian practice which he believes augurs well for some form of nationalized dentistry.

Many of these dental examinations were made six months ago which means that, in many cases, the mouth condition of the patient has deteriorated in the meantime. If these mouths are to be reconstructed at all it is certainly in the interests of the patient that such can be accomplished just as soon as possible and for this reason the work should be handled by anyone who can handle it, as is being done.

Another phase of the problem of reserving all this dental work of veterans for veteran dentists, even if they were able to do it, and one which is too often overlooked is the fact that the patient is entitled to some say as to who is going to do his dental work. To insist on a veteran of several years hard and dangerous service for his country going to a veteran dentist in whom, right or wrong, he has no confidence, to a dentist perhaps who has never been in private practice prior to his accepting a commission in the Dental Corps, and refuse him the service of a dentist who has looked after him since childhood, and in whom he has the greatest confidence, would surely be working the greatest injustice upon the patient. In many cases the veteran would be willing to forego the government service and pay for his dental work himself. The D.V.A. recognizing this fact, are placing the interests of the patient first and rightly so.

A further problem is the fee question. A veteran dentist, at least, is entitled to a reasonable fee for his service. Now it is just impossible to set a fee that is equitable for all of Canada and it is equally impossible to set a fee which is equitable for all dentists practising in the same community. For this reason it would seem fair to all concerned to allow the dentist to charge the patient the difference between his regular fee and the government fee, the dentist of course having given the patient a prior estimate as to what this charge would be and the patient having agreed. We are sure the patient would be better satisfied and feel that he was receiving the very best service possible to say nothing of the dentist. This is already being done in some quarters; to what extent I do not know, but it is not supposed to be done and some change of orders might well be made.

Col. Wright further points out, and as far as any explanation by authorities is forthcoming it would seem wisely so, that "Dental service should be authorized by the D.V.A. without further reference to the Dental Corps". The present system seems most cumbersome. A soldier presents himself to his dentist with an examination chart filled out six months ago. By this time there are several more cavities perhaps some teeth even have to be extracted and replaced due to this neglect. A further examination is necessary and this checked with his army chart and this takes twice as long as if the original examination had been made by the dentist. (For such a re-examination the dentist should receive a fee. At present he receives none.) Then a letter has to be written to the D.V.A. requesting authorization of this further work. The D.V.A. Supervisor has to forward the request to the Dental Corps where it is authorized and returned to the D.V.A. In time the authorization reaches the dentist. The forms are also so unnecessarily

complicated as to cause the greatest possible irritation to the dentist. In fact it is the worst chart that this writer has ever seen for purposes of this kind.

We cannot help but feel that if the veteran could be authorized to go to the dentist of his choice in the first place, and he could be directed as far as possible to an ex-C.D.C. officer, then have the dentist submit his examination on a practical chart for authorization by the D.V.A., the expense to the government would be greatly reduced, the veteran would get his work done much more promptly and if unable to get it done promptly he would at least not blame the government as he does now; and a great deal of annoyance would be eliminated for all concerned.

However, whatever the plan, good or bad, we as dentists, as Dr. Robinson points out, owe these veterans a debt which we cannot repay and we should make every effort to give them the best service possible and in the spirit of whole-hearted cooperation.

Let us not be overwhelmed by the magnitude of this task. Men of good will, and that means us, must face these problems with determination. These are not malignant forces over which we have no control and so even though tired, and as a profession we are very tired as a result of long years of overwork, let us still do some imaginative thinking and recapture the optimism and hope as regards this problem which has characterized our professional activities for the past hundred years.

M. H. G.

CORRESPONDENCE

Veteran Dentists

Winnipeg, March 6, 1946.

To the Editor: I am taking this opportunity of expressing some thoughts on the affairs of veteran dentists. Having been twice absent from my practice for four years, each time in the service of my country, I feel qualified to speak on this subject. On the first occasion I had been in practice for nine years when I enlisted. Twenty years after returning, I was asked to repeat. I knew what it would mean to my practice and what a harvest I was going to miss even though I drew pay and allowance of a Lt.-Col. this time. I knew too, that to return to practice at 60 would not have the same possibilities as returning at 37 for reasons that are natural.

Similarly, there is a younger and older group of veteran dentists today

whose treatment deserves consideration by other dentists and by the authorities at Ottawa.

The farming out of a vast amount of dental services at a satisfactory fee is going to help veteran dentists much in getting re-established. But there should be no question that *this service be reserved for veterans only* — veterans of this war only. I realize exceptions have to be made for emergency service and country patients who do not live near a veteran dentist. Why limit it to veterans of this war? Because the rest have been having a great harvest and have harvested many of our patients in our absence. If we harvest a few of theirs in the application of the above principle they should not complain as some have done. Many patients have had to go to

other dentists in our absence and see no object in changing back, but some return. Some patients who have gone elsewhere with their children now remain because of the children or felt they were getting superior service. Very few dentists have taken the trouble during the war to find out who was the dentist of the new patient and less trouble to see that they return now.

Lack of office accommodation has brought out the suggestion that returning dentists affected should go to the country towns. None who have been enjoying civil comforts and financial favours have offered to go out of town and give their city office to a waiting veteran. Oh no, but the veteran who has been away from home and the comforts of a city should go.

The completion of dental work for discharged service men is being speeded up by being handled through a

district supervising officer instead of Ottawa trying to handle it but there is still much delay. It would seem that once a soldier is discharged that all changes required in his dental work should be authorized by the D.V.A. without further reference to the C.D.C.

The veteran dentists who will find the hardest time becoming reestablished in practice will be those of fifty or over. Irrespective of ability they do not attract new patients as do younger men. The D.V.A. can and will assist them materially as also can be done by busy dentists who have excess patients to refer.

After knocking around for three, four or five years the veteran dentist wishes most to settle down permanently, generally in his former city or town, and to enjoy peace with his family and friends.

(Signed) W. W. WRIGHT.

BOOK REVIEW

Clinical Pathology and Treatment of the Dental Pulp and Periodontal Tissues,

by Edgar D. Coolidge, B.S., M.S., D.D.S., Professor of Therapeutics, Preventive Dentistry and Oral Hygiene, Chicago College of Dental Surgery, School of Dentistry, Loyola University. Second Edition. Thoroughly revised with 511 pages and 350 engravings. Published by The Macmillans in Canada, St. Martin's House, Toronto. Price \$8.00.

This book is the result of many years of teaching and clinical experience in the treatment of pulp and periodontal tissues and represents the study, research, observation and deductions of one who is recognized as a leader in this field of endeavour. The author begins his study with conditions of health and normal function and then outlines the changes that occur in the pulp and periodontal tissues as a result of disease, then fol-

lows treatment. This second edition includes much new material, two entirely new chapters having been added.

All phases of this subject are discussed including the diagnosis of dental pain; treatment of hypersensitive and infected dentine; treatment of the dental pulp in which vitality should be preserved and in which the pulp should be removed; root canal operations; oral hygiene and prophylaxis; types and treatment of gingivitis; treatment of periodontal tissues; occlusal stress; atrophy, etc.

It is generally conceded that many systemic diseases have oral manifestations and often the oral symptoms are the first to appear and so the dentist should have as complete a knowledge as possible of all phases of dental pathology and therapeutics.

This book can be highly recommended for general use.—M.H.G.

I doubt if there ever was a man who was not gratified by being told that he was liked by the women.
—Dr. Johnson.

DENTAL CORPS NEWS

SUPPLEMENTARY LIST OF CANADIAN DENTAL CORPS OFFICERS

RETIREMENTS

Rank, Name and Date	Civilian Address	Rank, Name and Date	Civilian Address
Capt. R. H. Bingham, 14-2-46	Moncton, N.B.	Capt. R. W. Morningstar, 25-2-46	Toronto, Ont.
Lt.-Col. R. S. Langstroth, 18-2-46	Saint John, N.B.	Capt. T. D. McColl, 13-2-46	Tilbury, Ont.
Capt. J. B. Sutherland, 12-2-46	Moncton, N.B.	Major W. G. McIntosh, 21-2-46	Toronto, Ont.
Major L. C. Cameron, 16-2-46	Lawrenceville, N.S.	Capt. A. W. O'Hara, 11-2-46	Kingston, Ont.
Capt. D. C. Eaton, 9-2-46	Sydney, N.S.	Capt. J. V. O'Shaughnessy, 25-2-46	Hamilton, Ont.
Capt. F. J. Forristal, 9-2-46	Sydney, N.S.	Capt. G. A. Oswald, 7-2-46	Hamilton, Ont.
Capt. P. C. Outhouse, 8-2-46	Tiverton, N.S.	Capt. B. Pattenick, 5-2-46	Toronto, Ont.
Capt. J. R. Vaughan, 2-3-46	Halifax, N.S.	Capt. J. D. Purves, 1-3-46	Toronto, Ont.
Capt. J. L. G. Boudreau, 4-2-46	Sherbrooke, Que.	Capt. E. F. Racher, 4-3-46	Sarnia, Ont.
Capt. R. V. Cholette, 11-2-46	Westmount, Que.	Major A. T. Roger, 19-2-46	Ottawa, Ont.
Capt. E. B. Clift, 15-2-46	Westmount, Que.	Capt. L. Shankman, 16-1-46	London, Ont.
Capt. R. R. Debieu, 15-2-46	St. Rose de Laval, Que.	Capt. B. J. Smith, 18-2-46	Toronto, Ont.
Capt. P. Desjardins, 21-12-45	Montreal, Que.	Capt. R. G. Spink, 28-2-46	Toronto, Ont.
Capt. R. S. Edmison, 4-2-46	Mt. Royal, Que.	Major C. G. Stewart, 24-1-46	Stoney Creek, Ont.
Capt. J. P. A. Faucher, 26-2-46	Assumption, Que.	Capt. J. C. Tanton, 14-2-46	Toronto, Ont.
Capt. J. W. Gallagher, 7-2-46	Vancouver, B.C.	Capt. I. J. Tureck, 12-2-46	Toronto, Ont.
Major P. J. Gitznick, 11-2-46	Quebec, Que.	Capt. D. M. Wallace, 26-2-46	Ferris, Ont.
Capt. J. E. Hibbard, 12-2-46	Sherbrooke, Que.	Capt. S. G. Werry, 15-2-46	Bowmanville, Ont.
Capt. J. P. Nadeau, 13-2-46	Sherbrooke, Que.	Capt. H. J. Wildfong, 8-3-46	Leaside, Ont.
Capt. J. G. A. Pelletier, 15-2-46	Quebec, Que.	Capt. A. W. S. Wood, 21-2-46	Milton, Ont.
Capt. E. Proulx, 15-2-46	Nicolet, Que.	Capt. J. H. Cohen, 22-2-46	Winnipeg, Man.
Lt.-Col. J. W. Rooney, 2-3-46	Quebec, Que.	Capt. L. N. Green, 29-1-46	Winnipeg, Man.
Major S. S. Smaill, 31-1-46	Huntingdon, Que.	Capt. N. Helman, 5-2-46	Winnipeg, Man.
Capt. C. T. Walsh, 11-2-46	Montreal, Que.	Capt. F. S. W. Green, 4-3-46	Saskatoon, Sask.
Capt. G. Zimmerman, 4-3-46	Montreal, Que.	Capt. D. H. MacDougall, 12-2-46	Indian Head, Sask.
Capt. F. N. Bennett, 13-2-46	Toronto, Ont.	Capt. J. D. McLean, 25-2-46	Regina, Sask.
Capt. H. A. Box, 8-3-46	Toronto, Ont.	Capt. R. V. Blackmore, 25-2-46	Calgary, Alta.
Capt. A. A. Brightman, 28-2-46	Toronto, Ont.	Major R. W. Bradley, 13-8-45	Edmonton, Alta.
Capt. G. H. Craig, 20-2-46	Hilton, Ont.	Capt. B. J. Eastwood, 27-2-46	Edmonton, Alta.
Capt. J. C. Cummings, 25-2-46	Ottawa, Ont.	Capt. A. D. Goldin, 12-2-46	Calgary, Alta.
Capt. W. H. Feasby, 6-3-46	Toronto, Ont.	Capt. W. F. Hancock, 11-2-46	Lethbridge, Alta.
Lt.-Col. D. J. Ferguson, 11-2-46	London, Ont.	Capt. L. W. Irons, 23-2-46	Calgary, Alta.
Capt. D. C. Fraser, 7-2-46	Sarnia, Ont.	Capt. D. C. McKechnie, 15-2-46	Wetaskiwin, Alta.
Capt. J. K. Garrett, 4-3-46	Sarnia, Ont.	Capt. C. W. B. McPhail, 8-2-46	Edmonton, Alta.
Capt. G. A. Graham, 19-2-46	Toronto, Ont.	Capt. D. Nicol, 8-2-46	Vulcan, Alta.
Capt. R. O. Green, 13-2-46	Scarboro Bluffs, Ont.	Capt. T. Nikiforuk, 14-2-46	Vegreville, Alta.
Capt. J. A. Greenfield, 14-2-46	Oakville, Ont.	Major O. L. Outway, 19-2-46	Stony Plain, Alta.
Major E. T. Groat, 8-2-46	Toronto, Ont.	Capt. O. F. Wright, 27-2-46	Edmonton, Alta.
Capt. R. B. Hambley, 17-1-46	North Bay, Ont.	Capt. N. Barlow, 20-2-46	Chilliwack, B.C.
Capt. A. E. Histrop, 12-2-46	Toronto, Ont.	Capt. R. W. Davis, 7-2-46	Vancouver, B.C.
Capt. A. M. Hunt, 12-2-46	Toronto, Ont.	Capt. R. J. Dent, 26-2-46	Vancouver, B.C.
Capt. R. C. Hutchison, 19-2-46	Whitby, Ont.	Major J. C. Foote, 5-1-46	Victoria, B.C.
Capt. I. Kaplan, 15-2-46	Toronto, Ont.	Major C. B. Mess, 21-2-46	Victoria, B.C.
Capt. F. G. Kellam, 12-2-46	Toronto, Ont.	Major W. C. Osborne, 5-2-46	Nanaimo, B.C.
Capt. L. W. Leake, 8-3-46	Cooksville, Ont.	Major A. F. Rader, 2-3-46	Vancouver, B.C.
Capt. W. H. E. Mason, 6-3-46	Port Elgin, Ont.		

CANADIAN DENTAL ASSOCIATION NEWS

(FROM THE OFFICE OF THE SECRETARY)

THE PRESIDENT'S MESSAGE

As President of our National Association it has been my privilege to travel, accompanied by Dr. Gullett, from coast to coast. Although we were greeted by rain in Vancouver, Victoria, Halifax and St. John, the weather certainly belied the enthusiasm of the dentists of those far-flung extremities of this great country of ours. Our meetings in these cities were extremely well attended and the hospitality and interest shown was a great stimulation.

The meetings in Montreal and Quebec City had been well organized and after enjoying the sumptuous hospitality and French cuisine at its best, we were greeted by large and en-

thusiastic audiences in each city. The discussion period after our presentations, was very fruitful and we felt highly complimented by the grasp the members of our profession in these cities had of the work and the aims of our Association. Our representatives in the province of Quebec have been doing a splendid work.

Our trip across the vast expanses of the prairies was broken by meetings at Regina, Calgary, Lethbridge, Edmonton, Saskatoon and Winnipeg. We were greeted at the train, at every stop, by large delegations and from then on, our every movement was planned for our enjoyment. Western Hospitality is truly some-

thing to be experienced. All meetings were largely attended, in many cases men coming great distances. Our profession in the West is surely in the hands of men who are enthusiastic and tireless in their efforts and who have a wonderful vision of the place our profession should hold.

Our visits to the cities of Ontario and the different organizations and Societies have been highlighted by the deference shown to your representatives of the National Association. These have been gratefully accepted, not as any personal gesture, but as an appreciation of the work the Canadian Dental Association is doing for the dentists of Canada. Interest in Ontario runs very high and the profession as a whole are solidly behind a strong national body.

May I personally thank all those who across Canada, have contributed so much to making our visits so enjoyable. It has been a great stimulation and a great education and I do hope over the years I may continue the wonderful friendships formed and that I may have the opportunity of repaying some of the wonderful hospitality shown to me in every city that I visited.

From my experience one could not but feel very optimistic for the future of our National Association. It holds a high place in the interests of dentists across Canada. They expect much from it in the future and are prepared to support it in a way that will enable it to fulfill that destiny. We of the Executive and Board of Governors of the Association must accept that challenge.

HARVEY REID, *President*.

SASKATCHEWAN

Professional Acts

The Saskatchewan News (Government Publication) reports that the "professional acts are to be reviewed exhaustively by the law amendments committee of the legislature, with a view to determining the powers conferred on the professional societies in the province and ascertain whether they have exceeded their powers in drawing up by-laws and regulations."

"Following its study of the acts, the regulations and briefs and other submissions, the committee will attempt to ascertain whether or

not a uniform principle applying to all professional acts can be established."

Other newspaper reports state that the intention is to have the Legislature exercise specified control over the general powers of societies now conferred by the professional acts.

Over the years provincial legislatures have at various times given consideration to the professional acts but no drastic changes have occurred from the established pattern for which there exist definite reasons. The basis upon which the professional acts are established, if properly understood, is sound. Unfortunately, public opinion becomes biased at times through erroneous propaganda.

In this respect, some statements would lead one to believe that when a member of a profession commits any crime, criminal or civil, he is not subject to court proceedings the same as any other citizen. Nothing could be farther from the truth. The only bearing the professional body may have in such action is of a supplementary nature in that a professional man may find himself in trouble respecting his licence if convicted of certain offences in a court action. Consequently the member of a profession is in a more vulnerable position, in this regard, than the ordinary citizen and often fears more greatly the action under the professional act than the court.

The professional acts place the responsibility of granting licences to practice in the hands of those most competent to judge who is qualified to practice the particular profession and also the power to take away the licence to practice from those found incompetent for clearly proven reasons which are stated in the act. Appeals from decisions may be made to the Court of Appeal. The transference of these powers to a government department would be disastrous both from the standpoint of professional advancement and the public good. Undoubtedly one of the cardinal reasons for placing these powers in the hands of the professional bodies was to remove the matter from the political arena. The arrangement has functioned extremely well as investigation will prove. The administration of the oldest dental act in Canada has been commended many times. On rare occasions appeals from the decisions have been made to the Appeal Court and have always been disallowed. The fact that this act has been administered successfully

for over seventy-five years is abundant proof of the satisfactory nature of the arrangement. The same observations can be made respecting all provincial dental acts in Canada.

The present high standard of dental practice in Canada, recognized the world over, is due in no small measure to the standards established by provincial legal bodies. Any action which will place these vital powers where political influence will become a qualifying factor is to be regarded with gravest suspicion.

If the aim of the Saskatchewan government is to attract more professional men by tinkering with the standards, then assurance may be given that the whirlwind will eventually descend upon them; that money expended for treatment services to a personnel of lowered standards will be wasted; and that the whole result will end in disaster for poor dental treatment services are worse than none at all. Other and better means are known whereby to attract professional personnel in adequate numbers and ease of entrance requirements is not one of them.

War Memorial Fund

As of 1st April last the following amounts by provinces have been contributed:

British Columbia	\$ 500.00
Alberta	487.00
Saskatchewan	702.00
Manitoba	500.00
Ontario	1,556.00
Quebec	184.00
Nova Scotia	432.00

Total \$ 4361.50

Critical Comments re Health Insurance in Great Britain and United States

From an editorial in circular as distributed by The London Group—Great Britain:

"The great man is to command the same recompense as the small, the clever as the stupid, in order to provide a common level of service for all. We would not protest if this common level were the high water mark of a Spring tide, but our dental tide will not be permitted to come in and go out; it will remain at the common level, higher than the low water mark, maybe, but lower than the high. Gilded Health Palaces and equal skill from all are to be principal weapons to

be employed in inducing private practice slowly to commit suicide, having first put the State Scheme on its feet. For this slow death there would be no compensation.

"Are we to lie down under this bulldozing of our professional hills and vales? Are we to content ourselves with weak protests or are we to be courageous enough to be the first body of citizens of this 'free' Britain of ours to resist this epidemic of bureaucraticitis?"

By Dorothy Thompson in her column "On the Record", entitled: "The Federal Health Scheme", in the Cleveland Plain Dealer.

"Universal compulsory federal insurance against illness of every wage and salary earner by a tax of 4 percent on his income up to \$3,600 will, if past experience elsewhere is a guide, mean vast overpayment for inferior services; that the poor pay for the rich, and not the other way around; and that income that should go for illness prevention in the form of nutrition, clothing, and shelter will be forcibly extracted to pay for the results of deprivation. The only people who will profit will be the new ranks of bureaucrats, two for every physician, supported by the people's contributions. The expenditure for ink will exceed that for iodine."

"On the matter of state medical care through enforced contributions there is plenty of evidence. Like Communism and Nazism, it is a German invention arising out of Bismark's concept of the providential state that would forever prevent revolt by tying the very existences of the people into it. The state cannot create anything. Wealth is created by producers—industrial workers, management, and farmers. State insurances are a means whereby the state skims off their incomes and gives part back in services, many of which the people are better able to provide for themselves as individuals in cooperative groups.

"Cooperative medical schemes are voluntary, efficient, cheap of administration, and cheap for the participants and could be standardized on a high level. State schemes are bureaucratic, heartless, and open to dangerous collusion between assembly-line physicians and patients at the public cost—as those know who have lived under them."

National Health Services Bill of Great Britain

The new National Health Services Bill was introduced by the Minister of Health, Mr. Bevin, in the British House of Commons on March 19 last. In spite of tremendous opposition by the professional bodies there is every indication that the bill will get approval from parliament.

Under the terms of the bill every person in Britain will have the right to free medical, dental and ophthalmological services. The doctors, dentists and other health specialists will normally operate from health centres which will be contained in a number of health regions.

The patient will be able to choose his own practitioner within the boundaries of the region. Practitioners joining the national service will be left free for a small part of their time to take private patients, if any are available. Those who remain outside the scheme may continue to practice privately.

In future, the sale of medical practices is forbidden.

The whole cost is estimated at \$15.00 per year for each citizen. (The lowest per capita cost estimated in Canada has been \$21.60.)

Medical men are to become civil servants according to best informed sources and will receive a civil service salary plus an additional small fee or per capita arrangement for each patient. No statement is available as to how dentists are to be paid but it is probable a similar system will be adopted.

The ownership of all hospitals is to be transferred to the government.

From the comment given by informed sources it appears the consensus of opinion is that the bill will be enacted in spite of oppo-

sition by professional groups. The measure is surely one of, if not the most, drastic to be introduced relating to health. If enacted great alterations are in store for the average medical and dental practitioner in Great Britain.

Convention Class Re-Unions

The following classes will hold re-union parties at the KING EDWARD HOTEL, Monday, May 27 at 6.30 p.m. prompt.

1 T 2 — THIRTY-FOURTH ANNIVERSARY

Dr. M. McIntyre, President, Edmonton, Alta.

Dr. L. E. V. Tanner, Secy-Treas., Main St., Toronto

1 T 6 — THIRTIETH ANNIVERSARY

Dr. H. R. Conway, President, Toronto

Dr. E. G. Berry, Secretary, 135 Lauder Ave., Toronto

2 T 1 — TWENTY-FIFTH ANNIVERSARY

Dr. Gordon Millen, M.L.A., Chairman, Toronto

Dr. A. O. Derbyshire, Secretary
Dr. Robert Johnston, Treasurer, 1808 Geriard St., E., Toronto

Dr. A. R. Kerr, Organizer

2 T 6 — TWENTIETH ANNIVERSARY

Dr. A. J. Vince, President, Toronto

Dr. E. B. Sisley, Secy-Treas., 28 Primrose, Mimico

3 T 6 — TENTH ANNIVERSARY

Dr. M. Twible, President

Dr. S. C. Shumacker, Secy-Treas.,
380A Bloor St. W., Toronto

Each class will have dinner together and later all join for a program of entertainment especially arranged for the occasion. Chairman will be Dr. Anthony Vince.

NEWS FROM THE PROVINCES

BRITISH COLUMBIA

Vancouver and District Dental Society

The regular monthly dinner meeting of the Society was held in the Hotel Vancouver on April 2. The speaker of the evening was Dr. G. D. Stibbs of Vancouver, who gave a paper on "Gold Inlays" following this with a table clinic on the same subject.

Dr. Stibbs is a clinician of outstanding abili-

ty and his presentation was much appreciated by the members of his own society, as it had been by members of other societies. Orderly procedure and attention to detail were much in evidence. A careful perusal of his article in the Journal is very much worth while.

The society observed a few moments of standing silence in memory of a member Dr. Wescott of Vancouver; and a former member

Dr. Snipes of Pasadena, who passed away recently.

Progress reports were made by the Diagnosis and Prosthetic Study Clubs. The formation of a new Study Club on Dental Medicine was announced.

Three new members were voted into the Society in the persons of:

Dr. A. H. Campbell, a graduate of the University of Toronto.

Dr. E. O. Springbett, a graduate of the University of Alberta.

Dr. S. R. Moscovich, a graduate of the University of Toronto.

Vancouver Dental Assistants' Association

The March dinner meeting of the V.D.A.A. was held at the Piccadilly Cafe on March 11 with 39 girls present.

The guest speaker for the evening, Dr. J. A. Chambers, President of the Vancouver and District Dental Society, delivered a most interesting address on the "Ethics of Dentistry", "V.D.A. Accounts", and "Fluorine". Dr. Chambers then assisted in the drawing of raffle tickets for a pair of hand knitted socks—lucky winner—Mr. M. Zuest, lab technician.

At the business meeting that followed it was unanimously voted to send our President, Miss Rita Cowan, as delegate to the Ontario Convention, and means and methods of raising the necessary funds were discussed.

Another enthusiastic meeting was held on April 8 at Adanac House. The evening commenced with a White Elephant Sale of costume jewellery proving profitable and a lot of fun.

The speaker was Mr. R. A. Atkinson, Senior Medical Bacteriologist at St. Paul's Hospital and his topic the blood "Rh Factor" and "Oral Bacteriology". Refreshments were served.

RITA RUSSELL, *Secretary*.

ALBERTA

Edmonton Dental Society

The monthly meeting of this Society was held in the Macdonald Hotel on April 2. There were 46 members and guests present.

Speakers for the evening were, Dean W. S. Hamilton, who outlined the highlights of his recent trip to the annual meeting of the Am-

erican Association of Dental Schools at Kansas City, Missouri.

Dr. Harold Knight next spoke on "Aesthetics in Full Denture Prosthesis". He stressed the need for harmonizing the colour, size and the placement of the teeth in order to give individuality, beauty and expression to the faces of our patients.

The final speaker for the evening was Dr. W. Webber, his subject being "The Relative Merits of Amalgam and Gold Restorations" making a plea in particular for more careful thought in the manipulation of dental amalgam.

The following were appointed to the Nominating Committee: Drs. M. A. McIntyre, F. Gowda and B. Shlain. Drs. G. Decker, N. Onischuk and G. Sutherland were appointed to the Auditing Committee.

SASKATCHEWAN

Shortage of Dentists

Appearing before the Law Amendments Committee Dr. D. J. Brass of Yorkton stated that there were about 185 dentists in Saskatchewan and intimated that about twice that number would be required to give adequate dental service.—*Regina Leader Post*.

Regina Dental Society

The members of this Society entertained their wives at the Saskatchewan Hotel Dinner Dance, on April 10.

Dr. R. H. Kerr is now the District Supervisor of H. District in charge of D. V. A., replacing Dr. R. S. Rose, who has left for the West Coast. Dr. Kerr practiced in Regina for three years before joining the Canadian Dental Corps, and left for overseas in 1940. Once overseas he was Brigade Dental Officer with the Second Division Service Corps, also with the S.L.I. He saw service on the continent and before returning to Canada in October 1945, he served with the occupational troops. The Regina Dental Society welcomes Dr. Kerr and his two capable assistants, both veterans, Dr. Alex Mintz and Dr. Harry Smith.

Saskatoon Dental Society

The members of this Society had as guests their wives for dinner and bridge. There were fifty present, which indicates a very successful evening. Dr. J. Schachter, who has resumed

his practice here, gave a most interesting talk on his experiences from D-Day until his return from Europe to England.

MANITOBA

Winnipeg Dental Nurses' and Assistants' Association

Dr. D. C. Aikenhead, who is the head anaesthetist at the Winnipeg General Hospital, was the guest speaker at the April meeting of this Association. Dr. Aikenhead is well known in Winnipeg dental offices, professionally, and received a warm welcome from the girls. He gave an informative talk on anaesthetics in general, stressing the newer anaesthetic agents. He explained how the various drugs worked and how they were very often used in combination to obtain the result desired by the surgeon. He also emphasized the importance of the patient allowing the physician to decide what anaesthetic or combination of anaesthetics should be used.

At the brief business meeting which followed five new members were welcomed to the association. The nomination papers were distributed and the new executive will be installed at the May meeting.

JANE MCCLURE.

ONTARIO

Dental Alumni, University of Toronto

The inaugural meeting of the dental group, as a unit of the University Alumni Federation was held at a dinner on April 8, in the King Edward Hotel, Toronto. Some time ago the Board of Governors of Ontario Dental Association approached Dr. Bothwell to organize this unit. A committee was appointed with Dr. Bothwell as Chairman and excellent progress has been made. Speakers of the evening were President Sidney Smith, Chancellor Cody, Dr. E. J. Clifford, President of the Alumni Federation and Dr. Frank Martin, President of the Ontario Dental Association.

There were about 80 present at the meeting including members as far west as London and east from Oshawa. All who attended expressed satisfaction that the dental alumni was a reality and that the meeting was very much worth while.

The new officers are:—

President:

Dr. John A. Bothwell, Toronto

1st Vice-President:

Dr. E. A. Grant, Toronto

2nd Vice-President:

Dr. W. J. Langmaid, Oshawa

3rd. Vice-President:

Dr. Martha Law, Toronto

Secretary: Dr. Glenn T. Mitton

Treasurer: Dr. Lee S. Honey

Councillors:—

Dr. A. Gillies, London

Dr. W. D. Clark, Hamilton

Dr. J. A. Marshall, Belleville

Dr. F. R. Hutchinson, Port Arthur

Dr. E. S. MacCartney, Ottawa

Mrs. Herbert Fields Passes

Many friends of Dr. Herbert Fields will learn with regret, the passing of his dear wife on Saturday, April 6. Sincerest sympathy is extended to Dr. Fields in his bereavement.

Hamilton Dental Association

The final meeting of this association was made the occasion to welcome back former members of the Canadian Dental Corps to civilian life. This meeting was held on April 2 at Fischer's Hotel. Following the dinner, Dr. J. G. Countryman gave the treasury report for the past year which showed a favourable balance. Dr. Herbert Field proposed a toast to the returned men and Colonel Dwight Coons replied on their behalf. Dr. A. D. A. Mason, Dean of the Faculty of Dentistry, University of Toronto, spoke briefly regarding the number of students in the college and post-graduate courses. Dr. Don Gullett discussed the possibility of state dentistry in this country. The president of the Ontario Dental Association, Dr. Frank Martin, reminded the members of the National Convention of Canadian Dentists on May 27-30 and urged support of the Canadian Oral Prophylactic Association. Dr. Harvey Reid, president of the Canadian Dental Association, spoke briefly giving a discussion of national dental problems.

Other guests included Dr.'s Harold Swales, Colton Bliss, Tom R. Marshall from Toronto, and Dr. J. E. Longley of St. Catharines.

The Executive for the ensuing year is as follows:

<i>President</i>	Dr. A. H. Leckie
<i>Immediate Past President</i>	Dr. W. W. Baxter
<i>Vice-President</i>	Dr. H. J. Totton
<i>Treasurer</i>	Dr. E. G. Dore
<i>Secretary</i>	Dr. J. G. Countryman
<i>Chairman of Program</i>	
<i>Committee</i>	Dr. D. E. Shultis
<i>Directors</i>	Dr. W. G. Foster
	Dr. G. W. Spinks.

Class 2T1 Reunion

Letter to Dr. R. E. Johnson,

I am enclosing cheque for \$7.50 to pay for my ticket to the Reunion Class Dinner on May 27.

I am looking forward greatly to this occasion and I know that the 2T1 crowd from Ottawa will be there as we have been talking it up. I expect that Tom Provost, Earl Marshall, Fred Thompson, Mac Pratt and Cecil Smart will also be there.

Clem Akins is ill at present but we hope he will be there.

You Toronto men deserve our thanks and appreciation for going ahead and making all arrangements and I hope you will not be disappointed in the response in numbers.

If I can be of any assistance at this distance, please let me know. I am

Yours sincerely,

A. A. CAMERON.

P.S.—Let us all be there for dinner, fellows, and have a grand time. Send in your fee of \$7.50 to R. E. Johnson, 1808 Gerrard Street East, Toronto.

Guelph Dental Clinic

As 60 percent of the children of elementary school age in Guelph require dental care, the Board of Health has approved the purchase of equipment for a one-chair dental clinic.

DENTAL LABORATORIES CONVENTION

The Dental Laboratories Association of Ontario will hold their (third) Annual Convention at the Royal York Hotel, Toronto on May 25, 26, and 27 at which the Guest speakers will be:

The Hon. R. T. Kelley, Minister of Health, Province of Ontario; Mr. Frank M. Dowsett, Toronto Board of Trade.

The Clinicians will be:

Dr. E. C. Bushell, McGill University, Montreal; Mr. Chas. H. Peck, New York.

Toronto Ladies' Auxiliary

One of the outstanding happy occasions in connection with the season's activities was the very successful Annual Family Bowling Party held on February 19. This event was well attended and delightful refreshments were served by the members of the Executive Committee.

On March 21 the Auxiliary had a combined business meeting and tea at the Heliconian Club. During the afternoon the Reverend J. D. Parks, returned Padre, gave a most enlightening address—relating many experiences of his overseas service.

On April 1 following the regular Executive meeting the members were entertained to a most delightful Tea at the Diet Kitchen, by the Vice President, Mrs. L. R. Davison. On this happy occasion Mrs. Roger W. Matchett, President, was presented with a beautiful Sterling Silver Salver, suitably inscribed. The presentation was graciously made by Mrs. Davison on behalf of the Executive Committee in appreciation of Mrs. Matchett's splendid leadership.

The Annual Meeting and Election of officers was held immediately following a Luncheon at the Royal York Hotel, on April 18. Reports of the various committees were presented.

LILLIAN E. CONBOY

Salary Increase for School Dentists

Increase in salary for dentists on school staffs and employment of a full-time dentist to increase the service given to secondary schools has been ratified by the Board of Education in London. The minimum salary was raised from \$1,421 to \$1,600 and the maximum the present \$1,650 to \$2,000. Salaries are paid for five half-days a week during the school year.—*London Free Press*.

The Toronto Study Club of Dental Technicians

The Toronto Study Club of Dental Technicians at their March meeting had the pleasure of listening to a very fine talk by one of their own members, Mr. Chas. Spence. He gave them a thorough clinic on the Laboratory work

related to the Meyers and Jaffe Techniques of full and partial dentures.

In the past they have depended almost entirely upon the members of the dental profession for their speakers, who have given generously of their time and effort for their instruction.

They wish to thank them all most sincerely and hope to call upon many others in the future. In the meantime they feel justly proud of their own clinician.

In recent weeks the "Study Club" has sponsored a series of clinics by Christy (Michael) Del Mas of San Francisco, who came to us very highly recommended and proved to be a very able clinician, giving the technicians and many of their friends in the dental profession some very excellent and valuable instruction in precision casting of inlays, partial dentures, and hollow dummies. The complete clinic lasted ten hours divided into three periods, which, though tiring was very much worth while and profitable.

Niagara District Dental Association

The final meeting of the year of Niagara District Dental Association was held at Welland on April the fourth.

Drs. C. Coburn, G. Oswald and G. Teal, returned men of C.D.C., were welcomed back to district. The attendance at the meeting was forty-two, a good representation of entire district.

Election of officers for 1946-47 was held and the following executive was elected:—

President:

Dr. K. M. Phillips, Welland

Vice-President:

Dr. D. G. Johnstone, Niagara Falls

Secretary:

Dr. R. F. Rogers, Welland

Treasurer:

Dr. W. R. Clarke, Welland

Directors:—

Dr. F. E. Dawe, St. Catharines

Dr. J. E. Longley, St. Catharines

The guest clinician for meeting was Dr. Wakefield, Professor of Surgery, University of Buffalo, Buffalo, N. Y. The subject of address was "Extraction of impacted molars and root tips for general practitioner." The address was accompanied by lantern slides that proved very interesting, instructive and practical.

The final meeting ended the first year of the organization of Niagara District Dental Association and it proved very successful from an educational standpoint and promotion of good fellowship.

R. F. ROGERS, *Secretary.*

Dental Nurses' and Assistants' Convention

Each Affiliated Association throughout our province is busy preparing for the Annual Convention to be held in May. The possession of the "Co-operation Trophy" is the aim of each group. Active participation in each of our contests affords ample opportunity to reach this goal. The Convention Committee is most anxious to provide a successful Convention. It will be successful if every Dental Nurse and Assistant is there. There is certain to be something from which you benefit. No matter in what part of Canada you live, a most hearty welcome is extended to you to join us from May 27 to 30. Remember the date and plan to be with us.

AFFILIATED ASSOCIATIONS

Brantford Association

Eight Brantford Dental Nurses and Assistants attended a very successful business meeting held at the home of Miss Mayme Healy on March 12. Lunch was served at the conclusion of the business.

Hamilton Association

This Association met at the Scottish Rite Club on March 13. Following the dinner, plans for the coming Convention were made.

Kitchener Association

On March 6 the Kitchener members had a dinner at the Walper House. A business meeting was held at the office of Dr. D. A. Messersmith when Convention plans were discussed.

London Association

Messrs. Lorne Braunel and Larry Gosso presented a very instructive clinic on "Gold Castings for Partial Dentures" at their laboratory on March 13, to the London Dental nurses' and assistants. Miss Daisy Walker presided during the business meeting.

Ottawa Association

Miss Addie Campderros welcomed a large number of the members of Ottawa A.A. to the February meeting held at Dr. Paul Cote's office. It was decided to hold a rummage sale on March 16. The speaker of the evening, Mr. E. Vowles, laboratory technician, demonstrated his technique on inlays. Refreshments were served.

Windsor Association

It was decided to have a Spring Tea in May when the Windsor members met on March 12. Miss McKutchen, V.O.N., gave a very interesting talk on her work and that of her organization. Shirley Graham presided during the evening.

QUEBEC**Dr. Harvey W. Reid and Dr. Don. W. Gullett Visit Montreal**

At a well attended and enthusiastic joint meeting of The Montreal Dental Club, Le Société Dentaire de Montréal and The Mount Royal Dental Society held at Le Université de Montréal on March 4, presided over by Dr. D. P. Mowry, President of The College of Dental Surgeons of the Province of Quebec, the President and Secretary of The Canadian Dental Association were welcomed to Montreal.

Dr. Reid's first act was to present Past President's Badges of The Canadian Dental Association to Doctors Eudore Dubeau and Arthur L. Walsh who were present to receive them and to Dr. Joseph Nolin in absentia. He paid tribute to the work that these three past presidents had done for the Association and made mention of the fact that Dr. Dubeau had been the Association's first secretary and third president.

Dr. Reid then addressed the meeting and in a limited time told a great deal of the story of the C.D.A., its trials and tribulations of the past; its strenuous work of the present and its ambitions for the future. He stressed particularly the need for strength in the Association at the present time if it is to successfully solve the many problems confronting the profession and take its rightful place in the affairs of our nation. He also emphasized the part that Dental Research was now playing and prophesied a little as to the increasingly

important part it will play; he warned against present over-enthusiasm that might result in the training of too many dentists and referred to "fantastic figures" that had appeared as to the number of dentists required in Canada.

Dr. Reid urged the fullest co-operation of the profession with respect to the questionnaire sent out by the Dominion Bureau of Statistics explaining how this information will be of great value to the C.D.A. He wound up his address with an invitation to give wholehearted support to the May convention of the Association in Toronto, "the first truly national convention" and "perhaps the greatest unifying effort yet attempted by the Association".

Dr. Gullett also addressed the meeting and painted a vivid word picture of the inside of the secretary's office and gave some details as to the volume of work carried on there and just how much it has increased in recent times. He asked not only for continued and greater effort on the part of every individual but pointed out the great need for increased grants from the various provinces if the work of the Association is to continue and be of increasing usefulness to the profession.

A question period followed the addresses and Dr. Gullett showed by his able manner in handling the many and varied queries that the problems of the dental profession and the work of the C.D.A. are part and parcel of his make-up.

The guests were introduced by Dr. J. K. Carver and thanked by Dr. Armand Fortier.

E. T. B.

Montreal Endodontia Society

Montreal has a new dental society. Not that the number of existing societies needed increasing but it was felt by a group of dentists who were actively interested in Endodontia that the formation of a study club, the program of which would deal principally with root canal therapy in all its ramifications, would be of great benefit.

Some of the local dentists who were present at the first annual meeting of the American Association of Endodontists in Chicago in 1944 were inspired by the progress made by our American confrères in the new approach to practicing and teaching this subject. Many possibilities were shown in proven techniques, and through research the developing of new

ones that would result in more favourable prognosis. And so a study group was formed under a joint chairmanship.

Several meetings were held by this group late in 1944, and plans were formulated. An equal number of members of each of the three existing dental societies, that is, The Montreal Dental Club, The Mount Royal Dental Society, and the Société Dentaire de Montréal who showed an interest in Endodontia and a desire to study the subject more closely, were invited to attend the first meeting. This and the following meetings had on the program papers and practical demonstrations, as well as discussions of future plans:—

Dr. John W. Singer, demonstrated the use of sulphuric acid in root canal therapy. Dr. H. M. Halpern, led the society in a study of dental histology. A preview of the progressive clinic on Endodontia given at the Montreal Dental Fall Clinic meeting, by Dr. M. B. Archambault, Dr. A. D. Richardson, Dr. H. H. Pearson. A clinic on the bleaching of discolored teeth by Dr. A. D. Richardson. A practical demonstration at the Université de Montréal on the procedure of opening and treating of a central incisor by Dr. Marcel B. Archambault. A talk on Bacteria in Endodontia and a practical demonstration, on the making of culture and culture media was given by Dr. H. H. Pearson at McGill University.

For the balance of the season, the following subjects will be presented: Bacteriology and Culture Making, Treating of Teeth with Non-Vital Pulp, Therapeutics, X-Ray Technique

and Diagnosis, Resection and Immediate Sterilization of the Roots.

The members are provided with multigraphed summaries of the papers and clinics.

At a general meeting in September the constitution and by-laws were unanimously adopted and the name "The Montreal Endodontia Society" was chosen. The first election of officers took place with the following results: Dr. A. D. Richardson, President; Dr. Marcel B. Archambault, Vice-President; Dr. H. H. Pearson, Secretary-Treasurer; Dr. Ralph Sommer, Professor of Operative Dentistry at the University of Michigan was elected Honorary President, in appreciation of his encouragement and inspiration.

The Dental Faculties of both McGill University and the Université de Montréal have demonstrated their interest, by permitting the Society the use of their lecture rooms, and clinical facilities.

Montreal Dental Nurses' and Assistants' Association

The March meeting of the Association was held in the Mount Royal Hotel with a record number of members present.

The guest speaker of the evening was Mr. R. M. Stoddard of E. R. Squibb and Sons who addressed the meeting on the subject "Pharmacy and the Dentists". He dwelt particularly on the story of Penicillin, how it was discovered and how it is made to-day, but also told of many other pharmaceutical products that are in common use in the dental office.

EMPIRE NEWS

GREAT BRITAIN

National Health Insurance in Great Britain

A new National Health Insurance Bill was presented in the British parliament by the Minister of Health on March 19 last. The British Medical Association has organized an aggressive campaign to fight the bill and is said to be raising a fund of \$6,000,000.00 for the purpose. It is understood that the bill will prohibit the buying and selling of medical practices, the present owners to be compensated by the B.M.A. The new bill provides for

complete medical services for everyone in Britain. The results of the campaign by the B.M.A. will be interesting. What part dentistry occupies in the new bill is not known at present by the writer.

During discussion in the House the question was asked if dental practices were included in the prohibition of sale and the Minister replied, not at present.

The long awaited Teviot Report on Dentistry—Report of the Inter-departmental Committee on Dentistry—has been published. Under the terms of reference laid down this

committee among other things was to report to the government upon "the progressive stages by which, having regard to the number of practising dentists, provision for an adequate and satisfactory dental service should be made available for the population". The report recommends that a comprehensive dental

service should be instituted as an integral part of the national health service *at its inception*. The broad recommendations for the part the dental profession should take in a comprehensive national health service were published in an interim report by this committee issued July 1944.—D. G.

GENERAL NEWS

WAR MEMORIAL SCHOLARSHIP FUND

(As of March 25th)

Received from

Saskatchewan	\$ 702.00
Nova Scotia	345.00
Ontario	1476.50
College of Dental Surgery of British Columbia	500.00
Alberta	487.00
Quebec	135.00
Manitoba Dental Association	500.00

\$4145.50

2 (B.C. & Man.)	\$500.00	\$1000.00
1	100.00	100.00
3	50.00	150.00
30	25.00	750.00
4	20.00	80.00
10	15.00	150.00
113	10.00	1130.00
144	5.00	720.00
7	3.00	21.00
1	2.50	2.50
20	2.00	40.00
2	1.00	2.00

\$4145.50

Midwinter Meeting of The Chicago Dental Society

The final registration figures for the 1946 Midwinter Meeting of the Chicago Dental Society are as follows: Dentists—6689, of whom 2557 were members of the Chicago Dental Society. There were 6249 guests including 42 physicians, 26 health nurses, 455 students, 1658 family, 1043 assistants, 140 hygienists, 180 lay, 731 laboratory, 1207 exhibitors and 767 exhibitors guests. The total registration amounted to 12,938.

A.D.A. Director of Press Relations

Herbert B. Bain has joined the staff of the Bureau of Public Relations of the American Dental Association as Director of Press Relations. He is in charge of preparation and dissemination of news and feature articles regarding dentistry and activities of the A.D.A. to the press and radio of the nation.

Bill to Reduce Income Taxes for Dentists in U.S.A. Introduced into Congress

A bill to give dentists, physicians and surgeons an additional deduction on their income tax for time devoted to charity, free clinic work and public research work was introduced in the U.S.A. Congress January 30.

The Surgeon General of the U.S.A. Views Dental Health

Condensed from Jour. of the Wis. State D. Soc. March, 1946.

Dental diseases are among the most common of human ailments. Almost all the population is afflicted with them, and they often induce a train of related maladies.

The two major causes of dental ill-health are caries and pyorrhea.

For every 100 men inducted into the Army there have been 170 extractions and 740 fillings.

It is apparent that the dental health of the young men of this country, men who should be at the peak of their efficiency, is not good.

Detailed information regarding the prevalence of dental defects among the entire adult population of the United States is limited. From the available data, one of our Dental Officers, who has given the problem much thought, has arrived at the following approximate figures, which represent the accumulated needs of the entire population of the country.

Extractions needed	238,500,000
Fillings needed	632,000,000
Requiring prophylaxis	125,000,000
Crowns and bridges needed	39,500,000
Partial dentures needed	20,000,000
Dental Disease treatments needed	20,000,000

The magnitude of the task presented if attempts were made to catch up with this vast accumulation of dental needs would be very great. It is estimated that 800,000,000 hours of work will be required to do this job, not including the needed laboratory time.

The shortage of dental personnel is a matter that has been and is of considerable concern. Best estimates are that in the immediate postwar period there will be in this country no more than between 70,000 and 75,000 dentists. Even if these were geographically distributed according to the requirements of the population and were working at maximum productivity, the tremendous dental needs could scarcely be met. Unless means are found whereby this group of dentists can treat more than the average of 400 patients each year, as recently estimated, they will be able to furnish service to only one-quarter of the population.

As a matter of information, a study of dental costs shows the following:

Prophylaxis.....	\$1 — \$5
Most frequent charge.....	\$2
Extractions.....	1 — 5
Most frequent charge.....	2
X-ray.....	5 — 15
Most frequent charge.....	10
Two-surface Amalgam fillings 2 — 30	
Most frequent charge.....	2 — 5
Two-surface gold inlay.....	2 — 100
Most frequent charge.....	10 — 15
Full denture.....	25 — 100
Most frequent charge	50

Where there is such a wide variance of income obtainable from dental services, it is not surprising that the members of the profession have tended to congregate in the urban centres and the wealthier sections of the country.

Fluorine

Great caution must be observed in the use of fluorine in control of dental decay, Dr.

Philip Jay, of Ann Arbor, Michigan, declared in *The JOURNAL* of the American Dental Association.

Dr. Jay, a member of the Faculty of the School of Dentistry of the University of Michigan pointed out that fluorine-bearing domestic water has been conclusively proved to inhibit dental caries among children.

He warned, however, that the prospect of fantastic exploitation of fluorine in dental caries control is a "menacing possibility."

"It is definitely established," he wrote, "that fewer carious dental cavities occur in persons continuously resident in fluoride areas during the first eight years of life than in persons residing in fluoride-free areas."

Maywood, Illinois, with a water supply containing 1.2 parts per million of fluorine, has a caries rate of 258 (the number of permanent teeth with caries experience per hundred children 12 to 14 years old), as compared with the high caries rate of 722 in Oak Park, Illinois, which is supplied with fluorine-free Lake Michigan water.

The evidence, however, is still insufficient to warrant the universal treatment of water with fluoride, Dr. Jay declared.

Neither should fluorides be used in mouthwashes or dentifrices, he asserted. He attacked as "extravagant" the claims made for bone meal products which contain fluorides.

Dr. Jay urged that communities wait for results in experiments being conducted at Grand Rapids, Michigan, and at Newburg, N. Y., before rushing in to add quantities of fluorine to their domestic water supply.

"It remains to be seen whether the addition of fluorine to a fluorine-free water will be accompanied by a decline in the rate and intensity of caries attack in a population exposed to water so treated," he wrote.

Trends from these experiments will not be discernible before 1950 and possibly later, Dr. Jay declared.

Too much fluorine in water tends to cause mottled tooth enamel. A dosage as high as 4 grams of sodium fluoride is usually lethal, Dr. Jay said. He added, however, that no toxic effects are believed possible with fluorine limited from one to one and one-half parts per million in drinking water.

Dr. Jay recommended that if the treatment of public water supplies proves beneficial,

children in rural areas might be benefited by internal medication with small doses of sodium fluoride.

Fluorine has been applied topically to teeth of children with considerable success in reducing the incidence of dental caries, but these experiments are not sufficiently advanced to draw final conclusions, he said.

In several controlled tests, temporary reductions as high as 50 per cent in the incidence of dental caries have been achieved. All of the favorable results, however, were obtained in children 7 to 15 years of age. Results among adults have been negative, Dr. Jay reported.

IN MEMORIAM

V. D. (Pete) Wescott, of Vancouver, B. C., passed away suddenly on the morning of March 11.

He was a man with an outstanding sense of humour and this partly accounts for his great popularity with people in all walks of life, as well as with the men in his own profession.

He served in the First World War, as an officer in the Dental Corps. The B. C. Dental Association had chosen him to be their president, for the coming year.

For the past ten years, he had practised orthodontia exclusively, and here he became a benefactor and friend of the younger generation.

He leaves to mourn his loss his widow Lou and his two sons, Paddy, (who is studying dentistry) and Bill. We hope that they realize as much as we do, that the dental profession and the entire community are much better off as a result of having had Dr. Wescott among us.

L. C.

Dr. Tansey is survived by his widow, two sons, four daughters, seven grandchildren and a brother.

•
Joseph E. Wright, of Toronto, Ontario, died at Christie Street Hospital on March 19, after a long illness.

He was graduated from the school of dentistry of the Royal College of Dental Surgeons in 1911. He began practice in Calgary where he remained until January 1935.

Dr. Wright served overseas in the Canadian Expeditionary Force during the First World War as Captain in the Dental Corps. On returning to Canada, he was commanding officer of the thirteenth detachment, Canadian Army Dental Corps with the rank of Major.

Dr. Wright was a Presbyterian, and while in Calgary, he was a member of his Church Session and was keenly interested in foreign missions.

He is survived by his widow and one daughter.

•
T. D'arcy Tansey, of Montreal, Quebec, aged 73, died on March 25 after a lengthy illness. Born in Montreal in 1872, Dr. Tansey was graduated from McGill University and did post-graduate work at the University of Chicago. He was a charter member of The Montreal Dental Club and maintained his interest in his profession until the onset of his fatal illness. He was a member of the Knights of Columbus and a life member of the Montreal Amateur Athletic Association.

•
Clifford Charles Nash, of Kingston, Ontario, died April 13. He was graduated from the Royal College of Dental Surgeons of Ontario in 1903 and he practised his profession at Bath before moving to Kingston. He took an active part in the community and church life of the city. He was a past president of the Rotary Club and a member of the Masonic Order. He was also a former member of the Kingston City Council and Board of Education.

Dr. Nash is survived by his widow, a daughter and two sisters.

Le Journal

DE L'ASSOCIATION DENTAIRE CANADIENNE

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Méssage du Président de l'A.D.C.

DOCTEUR HARVEY REID, D.D.S., Toronto

Le but principal de ma visite est de vous présenter un compte-rendu de mon administration, de vous mettre au courant de l'état financier de votre association, de discuter avec vous nos problèmes et, si je l'ose, de vous suggérer des projets qui devront être réalisés par une organisation nationale, projets imposés par notre mission de sauvegarder la santé publique. A la sortie d'une guerre mondiale, dont la gravité nous échappe, dans un conflit, où la destruction et la cruauté ont atteint un degré jusqu'ici inconnu, quand des millions d'êtres humains sont devenus des sans-abris et ont à peine conservé l'existence, on ne peut s'attendre à ce que le monde entier reprenne une vie normale, sans quelques années de tâtonnements et de travail. Rendons grâce à Dieu, parce que notre pays a été épargné des bombardements ennemis. Après ces bouleversements, il ne faut pas s'illusionner et croire que tout reviendra comme avant la guerre. Nous subirons, soyons-en sûrs, l'influence des changements opérés dans le monde qui nous entoure. Il est impérieux, maintenant plus que jamais, d'avoir une association nationale, forte et éclairée. Nous devons faire savoir aux autorités compétentes de ce pays, les manières efficaces de dis-

tribuer les soins dentaires dont le Canada a besoin. Il me fait plaisir de vous dire que vos représentants sont toujours bienvenus à Ottawa et qu'ils y ont acquis une réputation de franchise et de jugement. Il faut maintenir cette réputation, si nous voulons que notre association soit toujours aussi bien considérée. Depuis quelques années, le prestige de la profession dentaire canadienne s'est accru dans les milieux du gouvernement fédéral. Cette considération doit être gardée et grandir, si possible.

Plusieurs de nos confrères reviennent à leur clientèle, après de longues années passées dans l'armée. Le problème le plus important de ces dentistes est de se trouver un local. Notre association, par son comité de réhabilitation, travaille avec ardeur à la solution de ce problème; par tout le Canada, des comités locaux font leur possible dans ce même sens. On a fait beaucoup, mais il faut que l'enthousiasme du début se maintienne au même diapason. De nombreux confrères ne sont pas encore démobilisés et la tâche de leur trouver des endroits convenables s'avère de plus en plus difficile. Parlons, maintenant, des membres qui n'ont pas laissé la pratique civile. Ceux qui ont quitté leur foyer se sentent

* Causerie prononcée par le Président de l'Association Dentaire Canadienne, à Montréal, le 4 mars 1946, sous les auspices de la Société dentaire de Montréal, le Collège des Chirugiens-Dentistes de la Province de Québec, du Montreal Dental Club et la Mount-Royal Dental Society.

dépassés au retour. Il est de notre devoir de les accueillir chaleureusement et même de leur envoyer des patients en témoignage de reconnaissance pour la part qu'ils ont prise dans l'effort de guerre du Canada. C'est le but et l'espoir de votre association de voir ces vétérans s'établir avec bonheur et succès. Chacun fera sa part, j'en suis certain.

Vous avez reçu, récemment, des quartiers généraux de l'Association Dentaire Canadienne, le rapport des décisions prises par le Ministère des Affaires des Vétérans, au sujet des soins dentaires des soldats démobilisés. Tout vétéran, en règle avec le département du Ministère des Affaires des Vétérans, peut recourir, sans autorisation, aux services d'un dentiste, dans un cas d'urgence (réparation de dentier, douleur subite). Ces traitements seront payés au tarif officiel du Ministère des Affaires des Vétérans. Vous devez prendre garde et vous assurer que ces patients sont bien des hommes ou des femmes licenciés. On réfère, de préférence, ces patients à des vétérans du corps dentaire, mais tout licencié de l'armée peut, à sa demande, être autorisé à recevoir ces traitements chez un dentiste de son choix. Ces soins dentaires aux soldats licenciés représentent une somme de travail formidable; elle est cependant accomplie par notre profession d'une façon adéquate. Le département est satisfait, en général, des soins donnés et les dentistes paraissent satisfaits de l'administration de cette organisation et des rémunérations reçues.

Grâce aux efforts tenaces de l'Association Dentaire Canadienne, l'échelle des honoraires est parvenue au niveau actuel. Vous devez ainsi à votre organisation des revenus supplémentaires qui vous permettent de donner à ces vétérans des soins dignes du standard de la profession.

Un résumé du travail de notre Association ne serait pas complet sans un mot d'Assurance-Santé, qui nous intéresse fortement. Cette question, déjà vieille, nous semble, pour le moment, et à première vue, reléguée au second plan; elle est évidemment très intimement liée au sort des relations fédéro-provinciales. Ce projet du gouvernement, comme nouvelle

du jour, a cédé le pas aux enquêtes d'espionnage. Cependant, la conférence inter-provinciale se continue et on argumente de part et d'autre. Des rumeurs de toutes sortes nous parviennent de ces discussions. Il semble certain, à l'heure actuelle, que la loi d'Assurance-Santé, telle que conçue d'abord, ne sera pas ratifiée telle quelle par les gouvernements. On dit même qu'un nouveau projet de loi se prépare sans qu'on ait consulté les parties intéressées. Ce bill laissera plus de latitude aux provinces dans son interprétation et dans son exécution. Ce n'est encore qu'une rumeur, mais si ce projet se réalise, je suis d'avis, qu'il mêlera les cartes et qu'il ne haussera pas le niveau des services donnés au peuple canadien. Il est à craindre que les soins dentaires ne deviennent sujets au favoritisme de parti provincial. Vos représentants de l'Association ont l'oeil ouvert à Ottawa et sont prêts à défendre vos intérêts. Je demande aussi aux comités provinciaux de surveiller ce qui se passe, chez eux, à ce sujet.

Un mot, maintenant, sur le nombre de dentistes pratiquant au Canada. L'enregistrement actuel de dentistes est le plus élevé de toute l'histoire du pays (environ 5,000). Durant la guerre, il y eut une augmentation de 9%, le seul pays au monde qui accuse une augmentation. L'inscription des élèves dans nos Universités est considérable et augmentera sensiblement l'an prochain. Le Corps Dentaire Canadien nous a envoyé peu d'élèves cette année. Nous savons que plusieurs membres de l'armée ont manifesté l'intention d'étudier la chirurgie dentaire et possèdent les qualifications requises. De plus, comme d'habitude, des finissants de collèges s'inscriront à la Faculté dentaire, et leur nombre semble assez considérable.

Je désire vous laisser une autre pensée. Durant les trois dernières années, M. X. trouve difficilement à dépenser son revenu augmenté. Tout est rare. Notre profession a profité de cet état de chose et j'espère que cela va continuer. Mais qu'arrivera-t-il quand on obtiendra facilement radios, autos, appareils électriques, etc?

La situation actuelle peut changer. On

lit un peu partout que le Canada a besoin d'un nombre formidable de dentistes. Pesons bien les choses. L'armée nous libérera bientôt des dentistes qui reprendront leur pratique civile. Les Universités forment actuellement un grand nombre d'étudiants et ces perspectives sont encourageantes pour plusieurs années à venir. Un plan de santé sociale sera peut-être élaboré sous peu. Quand ces trois dernières conditions seront réalisées, alors seulement, devons-nous envisager une formation massive des dentistes. Dire qu'il y a une grande demande de services dentaires ne signifie pas que ce besoin se développera en proportion du plus grand nombre de dentistes.

Vous savez tous que l'A.D.C. a réussi à créer au sein du Conseil National des Recherches, à Ottawa, un comité de recherches dentaires. Cette réalisation met à la disposition de la profession dentaire du pays des fonds et des avantages que nous n'avions pas. N'espérez pas obtenir des résultats immédiats. Nous avons d'abord besoin de scientifiques entraînés à la recherche, et on ne s'improvise pas chercheur du jour au lendemain. Nous n'avons pas brillé dans ce domaine, mais avec de la patience, il nous est permis d'entrevoir un bel avenir dans ce champ d'activité.

La somme de cinq mille dollars est mise à la disposition du Comité des Recherches de l'A.D.C., par le D.D.C. Cet argent arrive à son heure pour entraîner des dentistes à la recherche. Il y a quelques mois, vous avez tous reçu un questionnaire du Bureau des Statistiques d'Ottawa. Les réponses n'ont pas été encourageantes. Plusieurs d'entre vous ont manqué de confiance. Permettez-moi de vous offrir des renseignements sur cette enquête. Avec ou sans la coopération de l'A.D.C., le Bureau des Statistiques avait décidé d'entreprendre cet inventaire. L'aurait-il entrepris sans la collaboration de cette dernière, les résultats auraient été sûrement déplorables.

Votre association garantit l'anonymat des réponses. Des réponses, en nombre imposant, doivent être retournées à Ottawa pour indiquer clairement les revenus pécuniaires de la profession dentaire.

J'espère sincèrement que ces données impressionneront suffisamment les autorités du pays sur l'importance des services dentaires et sur leurs rendements monétaires. Votre coopération est indispensable, votre effort est à l'avantage de tout dentiste canadien.

Il y a quelques semaines, un ordre-en-conseil était élaboré pour limiter l'usage de l'argent (Ag), au Canada, à 70% de la consommation de 1945. Ce rationnement signifiait une diminution de la proportion d'argent dans les alliages (amalgames), chose incompatible avec les données scientifiques. L'A.D.C. fit des représentations à Ottawa et réussit à soustraire les alliages dentaires de cette loi. Je vous rapporte ces faits, comme exemple des démarches faites pour vous, par votre Association et que vous ne connaissez guère.

Le Comité Exécutif de l'A.D.C. a tenu une réunion à Toronto, au début de ce mois-ci. Durant deux jours et deux soirées on a discuté les problèmes de l'heure de la profession. Ces questions sont variées; par exemple trente-neuf résolutions furent décidées au cours de ces deux journées. Un résumé de ces décisions paraîtra dans la revue et je vous invite à en prendre connaissance.

Permettez-moi, maintenant, de rendre hommage à vos deux représentants du Québec, le docteur Armand Fortier et le Maïor Carver. Ces confrères manifestent beaucoup d'intérêt à l'Association et n'épargnent pas leur temps pour vous y bien représenter. Je remercie ceux qui ont servi sur différents comités et ceux qui entreprennent la tâche au sein du nouveau Comité des Spécialistes et de la Spécialisation. L'enthousiasme et le bon vouloir des dentistes du Canada aident considérablement le travail de l'Association et contribuent à augmenter la valeur de notre profession. Permettez-moi de remercier personnellement le docteur Gérard de Montigny, d'avoir accepté la rédaction française de notre journal. Son effort enthousiaste sera sûrement couronné de succès. Merci aussi au docteur Paul Geoffrion, qui a fait si bien durant quelques années.

Vous avez reçu, il y a quelque temps,

du Comité de Mémorial de Guerre, un appel qui vous invite à contribuer aux fonds versés pour l'établissement de ce Mémorial. Cet argent servira à la fondation de bourses qui seront données aux cinq écoles dentaires du Canada. Cet hommage aux membres de la profession, qui sont tombés à leur devoir, sera une preuve vivante de leur sacrifice, mieux que tous les monuments et plaques de bronze. Les souscriptions sont libres. J'espère que chaque dentiste canadien se fera un devoir de faire sa part. Le montant n'a pas d'importance. Ce qui compte, c'est le geste.

Disons un mot, maintenant, du Congrès National des dentistes canadiens qui aura lieu à Toronto, les 27, 28, 29, 30 mai prochains. Cette réunion est la première tenue pour tous les dentistes du pays. Le programme des conférences et des cliniques ne renferme que des travaux faits par des Canadiens de toutes les provinces et j'ajoute que notre profession peut se comparer avantageusement aux professions dentaires des pays étrangers. Parmi les événements, il y aura la réception de bienvenue donnée au Hart House, mardi soir. Les dames sont invitées et tout l'édifice sera mis à notre disposition. Il y aura souper froid, spectacle dans la piscine, représentation au théâtre, etc. Nous devons encourager ce congrès annuel. C'est une occasion de bonne entente et d'union entre les dentistes d'un pays aussi vaste que le nôtre. Nous nous rendons compte, par ce contact personnel, que notre idéal et nos difficultés sont les mêmes et qu'on peut s'entr'aider.

Pour finir ce long discours, je vous parlerai de l'état financier de notre Association. Votre ministre des finances, le

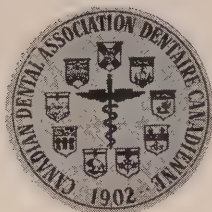
docteur Fortier, vous dirait que nous avons une petite réserve accumulée, grâce à un contrôle sévère des dépenses. Cette réserve est minime pour une organisation telle que la nôtre. Les sociétés, comme les individus, ont plus d'influence et sont mieux écoutées, quand elles sont appuyées sur des moyens financiers solides. L'an dernier, les dépenses ont excédé les revenus d'à peu près \$1,000. Cette situation ne peut durer. Le champs d'action de l'A.D.C. augmente rapidement et les dépenses de ses quartiers généraux sont plus grandes. Il nous faut un personnel plus nombreux. Les réunions annuelles du bureau des gouverneurs, des caucus plus fréquents du comité exécutif, une aide financière plus forte à divers comités, toutes ces nécessités s'imposent, si votre association continue de grandir comme elle l'a fait durant ces trois dernières années. L'A.D.C. a besoin d'un support financier plus grand de la part de chaque province, ses entreprises l'exigent. Pour terminer, résumons l'état général de l'Association. Elle a revêtu un nouvel aspect et représente vraiment la profession dentaire de ce pays, grâce à l'incorporation d'une nouvelle constitution et aux organismes professionnels, qui constituent ses membres corporatifs. Ce prestige lui a été conféré par l'effort prévoyant, ardu et désintéressé des membres de notre profession qui ont travaillé pendant plusieurs années. Leur vue juste de l'avenir et leur attachement à leur idéal a été couronnés de succès. Tous et chacun de nous, donnons un coup d'épaule et bâtissons une oeuvre plus parfaite au service de la population canadienne et de la profession dentaire.

Le Brigadier Frank Lott Donne Sa Démission

Les quartiers-généraux de la Défense Nationale annoncent la démission du Brigadier Frank Lott, 50 ans, C.B.C. de Toronto, comme chef du Corps Dentaire Canadien. Le Colonel D. S. Coons, O.B.E., M.M., 50 ans, d'Hamilton, Ont., lui succède.

Le Brigadier Lott, qu'on peut considérer comme le créateur du Corps Dentaire Canadien (unité autonome) devient directeur de la section des recherches professionnelles de la Compagnie Dentist's Supply de New York.

On se souvient que le Brigadier Lott avait été fait docteur en Chirurgie Dentaire "Honoris Causa" de l'Université de Montréal, en 1942.



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MEMORIAL DE GUERRE DE L'ASSOCIATION DENTAIRE CANADIENNE

Les dentistes du Canada veulent honorer la mémoire des leurs, qui ont donné leur vie au service de la liberté, durant cette deuxième guerre mondiale, qui se terminait, l'an dernier, à cette époque.

L'Association Dentaire Canadienne rend hommage aussi à ses membres, qui, enrôlés dans l'armée du Canada, ont quitté leur pays et toutes ses douceurs pour suivre cette armée sur tous les fronts.

Ce Mémorial consacre, de plus, l'effort de guerre de tous les membres de la profession, qui, restés au service de la population civile, ont avec elle fourni un rendement industriel sans parallèle dans notre histoire.

Ce souvenir, l'Association veut le perpétuer dans l'esprit des générations présentes et de celles qui nous suivront.

Mieux que tous les monuments, mieux que tous les cénotaphes, ce Mémorial illustrera, d'une façon vivante et perpétuelle, la contribution éclatante de notre profession à la victoire de nos armées. Ce Mémorial prendra la forme de bourses d'études, qui seront octroyées à des élèves méritants, dans les cinq facultés dentaires du Canada.

Pendant cette période d'après-guerre, les hommes de bonne volonté cherchent les causes de ce conflit, qui a coûté tant de souffrances. Ils se penchent vers la jeunesse contemporaine pour déposer en elle toutes les semences d'un monde meilleur.

M. Herbert Hoover, ancien président des Etats-Unis, chargé d'une enquête sur le ravitaillement européen, déclare qu'il est plus important de

Le Traitement de la Parodontose et ses Diverses Tendances

par JULES THEBAUD, D.D.S., M.Sc.D.,

IV

(Suite et fin).

Si nous émettons le vœu que le *PROGRES QUI DEVRA SE REALISER DANS LE DOMAINE DE LA THERAPEUTIQUE DE LA PYORRHEE DEPENDRA DES EFFORTS FAITS EN MEDECINE GENERALE*, nous devons faire la part des choses, et nous attendre à ce que tous les membres de la profession dentaire s'intéressent au moins à la routine du diagnostic de cette affection.

Ils sont légion les patients qui ont passé chez des "compétences" pour des travaux de prothèse et de dentisterie opératoire de longue haleine, sans que les symptômes de cette maladie fussent décelés à temps. . .

La grande tragédie qui se répète tous les jours se joue en un acte!

Le thème est toujours le même; un patient confie sa bouche à son dentiste de famille, depuis l'adolescence jusqu'au *CAP DE LA QUARANTAINE*, les travaux de restauration sont en parfait état, mais un jour arrive où le patient, inquiet, découvre lui-même l'ébranlement des dents, et la coloration anormale des gencives d'où s'échappent parfois des sécrétions. . .

Devant ces faits qui se répètent si souvent, nous considérons l'opportunité qu'il y a pour tous dans notre profession, de s'intéresser d'une façon routinière au diagnostic de cette affection si commune, puisque certaines statistiques révèlent à peu près que chez les personnes qui ont dépassé la quarantaine, 30% montrent une tendance à la pyorrhée, et 16% en sont atteintes.

Dans un bref examen, tous les signes sont flagrants: c'est la profondeur du sillon gingival qui nous intéresse, c'est la densité, la coloration et le contour des

gencives. C'est aussi la position et l'articulation des dents qu'on contrôle. On serait toujours dérouté s'il fallait se limiter uniquement à la recherche de sécrétions purulentes dans le sillon gingival ou se baser sur le degré de mobilité des dents. Ce sont là des symptômes qui, ne peuvent servir d'indicateurs d'une façon infaillible, parce qu'ils ne se manifestent pas toujours. C'est ce qui explique pourquoi la parodontose peut se développer à l'insu de n'importe quel praticien quise bornerait au simple dépistage de ces deux éléments du diagnostic; car l'ébranlement et le recroquevillement des dents se révèlent à une phase assez avancée de la désintégration du bord alvéolaire et de la rupture des fibres du ligament péri-dentaire. Quant à la présence de pus, nous savons qu'on ne doit pas en être alarmé, parce qu'elle indique plutôt une défense locale de la part des tissus. Le sondage du sillon gingival pour la recherche des brèches et des culs-de-sac semble être plutôt le meilleure routine à observer dans tous les cas. Même la radiographie qui est ordinairement le dernier point de repaire pour le périodontiste, se trouve incidemment à la première portée de tous aujourd'hui.

Il est donc paradoxal que des dentistes se désintéressent de l'allure sournoise et des répercussions dangereuses de cette affection, pour s'ingénier, de préférence, à obturer des cavités presque imperceptibles, quand les dents sont menacées à leur base même.

Les rapports entre le public et l'homme de profession étant auréolés d'un sentiment de grande confiance, la part de responsabilité de celui-ci ne doit pas être minimisée. Le dépistage de la parodontose par *TOUS LES DENTISTES*

MILITANTS, est par conséquent la tendance qui doit d'abord se généraliser, la médecine générale fournira ensuite sa contribution.

Le regard rétrospectif, que nous avons furtivement jeté plus haut sur toutes les méthodes courantes, nous invite à apprécier leur valeur respective et à considérer l'opportunité de les combiner suivant le degré des lésions périéciménto-classiques. Aucune statistique n'indique laquelle de ces méthodes a reçu le suffrage de la profession; cependant on peut noter qu'il existe actuellement un fort penchant pour certains traitements, surtout parmi les plus récents, tels que l'électrocoagulation, l'emploi des substances chimico-coagulantes et la méthode chirurgicale, sans compter le traitement "hygiénique", ou conservateur, auquel on réserve généralement une place de prédilection dans le période préparatoire à l'application des autres thérapeutiques.

La couleur des opinions est si variée par rapport aux résultats obtenus dans l'emploi de ces diverses méthodes, que les discussions au sujet de l'efficacité de chacune d'elles prend parfois l'allure d'une affaire personnelle; plusieurs opérateurs se basant sur leur expérience sont enclins à exagérer les inconvénients des autres méthodes laissées en marge de leur pratique.

Si l'on nous permettait de risquer quelques observations personnelles sur les trois méthodes précitées, nous pourrions dire que l'électro-coagulation ne mérite pas d'être entourée de cette auréole mystérieuse et magique que les manufacturiers semblent conférer à l'appareil de Webb. Cet appareil présente un certain avantage quand les électrodes sont employés pour pénétrer dans les clapiers peu profonds, ou pour "faire sauter" des papilles trop développées, présentant une forte tendance à l'hypertrophie; mais il doit être employé avec beaucoup de précaution. Certains opérateurs recommandent de laisser en place les tissus coagulés qui tombent d'eux-mêmes dans la suite; mais par expérience, nous les enlevons au moment de l'intervention, afin de faciliter superficiellement l'organisation du caillot san-

guin si indispensable à leur guérison; autrement les tissus coagulés, prennent, après quelques heures, l'aspect d'une membrane sphacelée, d'une couleur jaune sale et d'un parfum nauséabond.

Enfin de compte, nous pensons que cette méthode mérite encore de passer par le crible de l'expérience avant d'être recommandée aux débutants.

Si nous employons les pâtes ou ciments "packers" à base d'oxyde de zinc, d'huile d'amande et d'eugénol qu'on peut considérer comme de précieux adjuvants dans la thérapeutique spéciale des clapiers, nous ne pouvons nous résigner à appuyer les recommandations de Orban, dont nous admirons tant les savantes recherches. Sa formule est un mélange caustique à base de formaldéhyde qu'on ne saurait employer sans appréhension, en raison de la nécrose du bord alvéolaire qu'elle peut entraîner.

Nous nous devons de faire quelques remarques personnelles au sujet de la méthode chirurgicale, parce que nous pensons qu'il est légitime qu'une place spéciale soit accordée à la chirurgie dont les buts spécifiques consistent, en médecine générale, à atteindre les désordres internes, soit en éliminant les néo-tissus de nature pathologique, soit en rectifiant les tares fonctionnelles au moyen de la résection ou de l'ablation partielle des organes.

L'école qui préconise le traitement chirurgical fait ordinairement une distinction bien nette entre les quatre variantes:

- a) La gingivectomie.
- b) Le curettage subgingival.
- c) Le curettage radical avec dissection des gencives.
- d) Et le curettage radical modifié.

a) La gingivectomie, depuis qu'elle a été pratiquée par Robitzek, un peu avant l'entrée du siècle, a passé par un stade de perfectionnement intéressant; aussi elle est devenue moins mutilante, et se trouve mieux conditionnée par l'application dans les interstices dentaires de pâtes antiseptiques ou "packers" qui protègent les parties resséquées ou curettées.

L'application des pâtes ou "packers" ne saurait constituer à elle seule UNE

FORME DE TRAITEMENT, comme beaucoup semblent le croire. C'est plutôt un moyen accessoire qui permet de dégager le champ opératoire par la bécance que laissent ces pâtes, afin de faciliter le détartrage et le polissage du cément.

Après son insertion "in situ," deux ou trois jours avant l'intervention, qu'il s'agisse de la gingivectomie, de l'électrocoagulation ou d'un curettage, la désinfection et l'accessibilité des clapiers se font avec plus d'aisance.

Mais, après une intervention sanglante, nous croyons qu'il est inopportun d'appliquer immédiatement ces "packers", avec l'idée de les y laisser plus de 8 jours. En les renouvelant tous les deux jours, le lavage et la désinfection des parties opérées favorisent plus rapidement la guérison.

Pour notre part, nous nous sommes rangés du côté de Merrifield et de Lundquist, qui ont substitué des pointes de paraffine à la place de ces pâtes antiseptiques pendant les premiers 24 heures qui suivent l'intervention. Cette paraffine qui remplace dans son étendue la partie de la gencive disparue peut être renouvelée à volonté, ce qui facilite les lavages et les attouchements plus fréquents. A côté des nombreux avantages de la gingivectomie, il est regrettable qu'elle soit contre-indiquée dans les régions antérieures, de canine à canine, pour des raisons d'esthétique que nous connaissons.

Dans le curettage subgingival, le maniement de la curette à la recherche des masses granuleuses-infectées au fond des clapiers, sans exposer le champ opératoire, est en pleine contradiction avec les principes de la chirurgie opératoire; par manque de commodité, ces mouvements peuvent entraîner des dégâts, si l'instrument est poussé trop loin, et ils conduisent celui qui l'adopte à un régime de laisser-aller.

C'est donc une manoeuvre trop facile et trop timide. Nous ne saurions la recommander en dehors du cas particulier qui consiste à atteindre un seul espace interdentaire, dans les régions antéro-inférieures, par exemple.

c) Le curettage radical, "flap" opera-

tion", avec dissection de la gencive, tel qu'il a été recommandé par Zentler et Neuman, est certainement *LIE AUX PRINCIPES INTE'GRAUX DE LA CHIRURGIE*. Il donne des résultats très appréciables, en ce qu'il répond aux buts visés, surtout pour le curettage des culs-de-sac dans la région antérieure, où à cause du déchaussement qui se produit au contour gingival, la gingivectomie n'est pas de mise.

L'accessibilité du champ opératoire, après la dissection, permet d'atteindre tous les tissus pathologiques, y compris le cément et les bords alvéolaires. Mais la guérison complète de la partie opérée est aléatoire en raison des complications qui peuvent survenir du fait de l'écartement des lambeaux suturés, de la pénétration des fluides buccaux et de l'hémorragie secondaire.

Cette technique requiert tant de précision, qu'elle n'est pratiquée que par ceux-là qui, après une longue routine, ont acquis un certain doigté. C'est en raison de ces inconvénients, que son usage n'est pas recommandé pour la zone postérieure des arcades. Cependant, pour éviter les aléas dus principalement au relâchement des sutures et à l'inefficacité des soins post-opératoires, nous nous proposons de signaler dans une autre étude, quelques recommandations susceptibles de mieux garantir le stade si délicat de la guérison.

d) Le curettage modifié qui résulte d'un tempérament modéré apporté à la technique radicale ou "flap", nous met à l'abri des complications précitées. Elle s'étend à chaque intervention sur une surface qui ne comprend pas plus de trois ou quatre espaces interdentaires. La dissection totale de la gencive se ramène à un écartement bien moins important, juste assez pour faciliter la visibilité du champ opératoire. La suture, qui est de rigueur, est plus stable ici en raison des limites assignées à la dissection.

Beaucoup d'opérateurs se sont définitivement aigüillés vers cette technique. Sans vouloir nous attaquer à certaines techniques vermoulues de la chirurgie dentaire d'avant la lettre, nous avons voulu plutôt signaler l'aspect que présente actuellement le problème du traite-

ment de la paradentose, qui préoccupe tant notre profession; *et montrer du doigt les tendances de fond* qui expliquent l'attitude des groupements profes-

sionnels qui s'intéressent à la thérapeutique de cette affection, qui peut-être le siège d'une infection focale très opiniâtre.
270 av. Outremont, Outremont.

Recherches sur les Causes de la Carie.

Un comprimé par jour de 3 mg. de fluorure de calcium, de 30 mg. de vitamine C et de 400 unités de vitamine D ont réduit la carie dentaire chez un groupe d'enfants traités par ce moyen pendant six à huit mois. Le fluorure de Calcium seul réduit aussi l'incidence de carie dentaire, mais est moins efficace.

L. P. Stream (New York City)

N.Y. *St. J. Med.* 45: 2183-85, 15 oct. 1945.

Société d'Endodontie de Montréal

Montréal est dotée d'une nouvelle société dentaire. L'idée de la fondation d'une telle société est venue à la suite du premier congrès de la Société d'Endodontie américaine, tenu à Chicago en 1944. Vu le progrès accompli par nos voisins dans la pratique et l'enseignement de cette matière, un certain nombre de dentistes de notre ville ont décidé de former un cercle d'étude pour mieux se tenir à la page.

Dès 1944, des plans furent tirés pour inviter un nombre égal de dentistes appartenant aux trois sociétés dentaires de Montréal, à savoir: la Société Dentaire de Montréal, le Montreal Dental Club et la Mount-Royal Dental Society. On désirait qu'aucune faction ethnique eût le dessus sur l'autre, comprenant bien que ce n'était pas une représentation proportionnelle.

Voici un aperçu des activités qui ont pris place au cours des assemblées qui suivirent:

Le Docteur John W. Singer démontra l'emploi de l'acide sulfurique dans les traitements de canaux. Le Docteur H. M. Halpern donna une conférence sur l'histologie de la dent. Un aperçu de la clinique progressive présentée plus tard à la Fall Clinic du Montreal Dental Club par les Docteurs M. B. Archambault, H. H. Pearson et A. D. Richardson. Une conférence sur la technique du blanchis-

sage des dents par le Docteur A. D. Richardson. Une démonstration clinique à l'Université de Montréal sur la façon de traiter une incisive dont la membrane périodentaire est normale, par le Docteur M. B. Archambault. L'étude bactériologique suivie d'une démonstration sur la façon de préparer des milieux de culture par le Docteur H. H. Pearson, à l'Université McGill.

Comme programme futur, la Société se réserve une multitude de sujets des plus intéressants. Des copies polygraphiées sont distribuées après chaque assemblée à tous les membres présents.

Lors de l'assemblée générale tenue au mois de septembre 1945, la Constitution fut adoptée unanimement et le nom de "Société d'Endodontie de Montréal" fut choisi.

Voici le résultat de l'élection des officiers:

Dr. A. D. Richardson, président (section anglaise).

Dr. M. B. Archambault, vice-président (section française).

Dr. H. H. Pearson, secrétaire-trésorier (section juive).

Le Docteur Ralph Sommer professeur à l'Université de Michigan fut élu premier président honoraire en appréciation de son encouragement et de son inspiration.

Les Facultés de Chirurgie dentaire de l'Université McGill et de l'Université de

Montréal ont démontré leur intérêt en permettant à la nouvelle société de tenir ses assemblées et cliniques dans leurs locaux.

Délégués Officiels de l'Université de Montréal à Kansas city

L'American Association of Dental Schools a tenu son congrès annuel à Kansas City, Texas, les 18, 19 et 20 mars.

La Faculté de Chirurgie Dentaire de l'Université de Montréal était représentée à ces assises par son doyen et directeur des études, le docteur Ernest Charron, et par le docteur Gustave Gauthier, ass.-directeur des études.

Ce congrès des dirigeants des études dentaires permet de se rendre compte des changements apportés aux programmes d'enseignement dans les facultés dentaires d'Amérique et de profiter des méthodes mises à l'essai un peu partout dans ce domaine.

Doctorat "Honoris Causa" Dérerne au Doyen de la Faculté de Chirurgie Dentaire de l'Université McGill

L'Université de Montréal, à la demande du Conseil de la Faculté de Chirurgie dentaire, conférait au Docteur Arthur Lambert Walsh, doyen de la Faculté de Chirurgie dentaire de l'Université McGill, le titre de docteur en chirurgie dentaire "Honoris Causa", mardi, le 26 février, au Cercle Universitaire.

A l'occasion de la présentation de ce diplôme au Docteur Walsh, les corps enseignants des deux facultés dentaires des universités de la ville et les membres de la profession dentaire se réunirent, pour dîner, au Cercle Universitaire, à 7.15 du soir.

Le Docteur Walsh a été honoré par l'Université de Montréal pour son dévouement à la cause de l'enseignement dentaire au Canada et en Amérique du Nord. Le Docteur Walsh est doyen de la Faculté dentaire de l'Université de

McGill depuis 1927; il a rendu des services signalés à la profession dentaire du Canada comme Président de la "Canadian Dental Association" et à la profession en général comme Président de l'American Association of Dental Schools. Le Docteur Walsh a collaboré avec les membres de la Faculté de Chirurgie dentaire de l'Université de Montréal dans toutes les occasions, qui se sont présentées. Cette réunion des diplômés des Universités de Montréal et McGill est une illustration de la bonne entente et de l'esprit de collaboration qui existent chez les dentistes des deux groupes ethniques de notre ville.

Parmi les invités d'honneur à cette fête, nous notons: Monseigneur Joseph Charbonneau, Chancelier, Monseigneur Oliver Maurault, Recteur de l'Université de Montréal, Monsieur Cyril James, Principal de l'Université McGill, Monsieur Morris Wilson, Chancelier de l'Université McGill, Monsieur Alphonse Raymond, Président de la Commission d'administration de l'Université de Montréal, le Docteur D. P. Mowry, Président du Collège des Chirurgiens-Dentistes de la province de Québec, le Docteur Ernest Charron, doyen de la Faculté de Chirurgie dentaire, le Docteur Miner, ancien doyen de la Faculté dentaire de l'Université Harvard, le Docteur Arnold D. Mason, doyen de la Faculté dentaire de l'Université de Toronto, le Docteur W. W. Woodbury, doyen de la Faculté dentaire de l'Université de Dalhousie, le Faculté dentaire de l'Université d'Alberta, le Docteur Harvey Reid, Président de Docteur D. Hamilton, doyen de la l'Association Dentaire Canadienne.

Réunion de l'Exécutif de l'Association Dentaire Canadienne, à Toronto

Les membres de l'Exécutif de l'Association Dentaire Canadienne se sont réunis, à Toronto, les 4 et 5 février 1946.

Tous les membres étaient présents, excepté le docteur R. A. Rooney, retenu chez lui par la maladie.

Les présidents de tous les Comités ont

présenté des rapports de progrès sur leurs activités.

Les propositions suivantes furent acceptées:

1) Un don de \$300.00 fut fait pour aider à l'organisation d'un cours traitant de Pédiodontie aux dentistes du Manitoba, de la Saskatchewan et d'Alberta en collaboration avec la Commission Canadienne d'Hygiène Dentaire et les Gouvernements provinciaux.

2) Tout postulant en règle avec son Association Dentaire Nationale peut devenir "membre associé" de l'Association Dentaire Canadienne, en en faisant la demande.

3) Le Président et le Secrétaire furent chargés de se renseigner sur les possibilités de se joindre aux autres organisations professionnelles pour faire des représentations au Gouvernement Fédéral au sujet de l'Impôt sur le Revenu chargé aux dentistes. Cette proposition a pour but de donner de meilleures conditions aux membres de la profession dentaire.

4) A cause de la place plus grande occupée par la Dentisterie Industrielle dans l'exercice de notre profession, on a décidé de former un Comité pour étudier les problèmes de cette section de la pratique dentaire.

5) Un comité spécial a été nommé pour l'étude des problèmes inhérents aux services de prothèse.

6) Pour faire suite à une demande faite à la dernière réunion plénière des membres de l'Association, on a chargé un comité d'approfondir l'étude de tous les aspects de la pratique de spécialités par des spécialistes.

7) En réponse à une demande du Ministère de la Santé et du Bien-Etre National, l'Association Dentaire Canadienne désire être représentée dans la Section de la Santé de l'UNO.

8) Un projet d'Assurance-groupe pour les membres de l'Association fut étudié.

Gomme à Mâcher et Vitamine K.

Comme le savent tous ceux qui souffrent de maux de dents, la carie est causée par un acide, qui se forme dans la

bouche au cours de la fermentation des aliments. Les dentistes peuvent en partie neutraliser ou diminuer la formation de cet acide à l'aide de produits chimiques sûrs. Le problème n'est pas de savoir quoi prescrire aux patients bien occupés, mais comment leur faire suivre ces prescriptions.

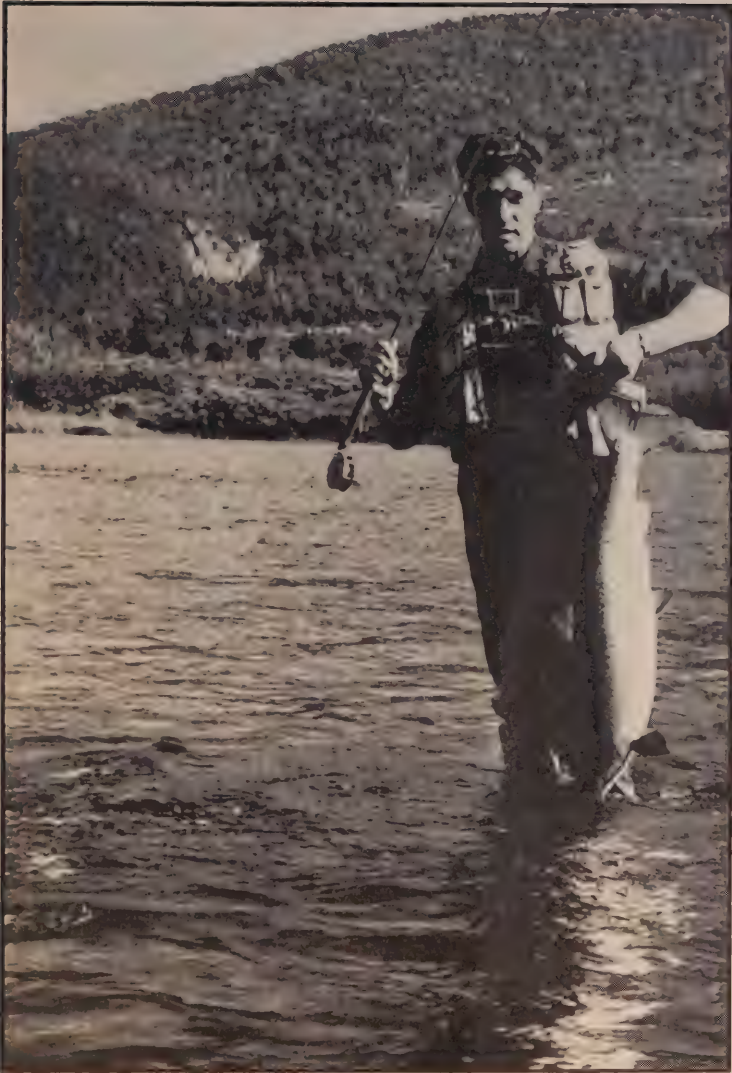
Le docteur Leonard S. Fosdick et ses associés de l'Université Northwestern de Chicago a peut-être trouvé la solution de cette question. Dans un rapport préliminaire publié dans le Journal of Dental Research, les chercheurs donnent des statistiques attendues depuis longtemps sur la vitamine K synthétique (2 méthyl-1.4 naphthoquinone), qui combat l'acidité. Ces savants ont pensé à mettre cette vitamine dans une gomme à mâcher. Pour les besoins de l'expérience, 55 étudiants de Northwestern ont mastiqué cette gomme dix minutes après chaque repas. Un groupe de 45 étudiants ont mastiqué une gomme ne contenant pas de vitamine K. Un troisième groupe n'a rien mâché du tout. Résultat: après 18 mois, ceux qui ont mastiqué cette gomme vitaminée présentent de 60% à 90% moins de nouvelles caries que les autres. Les chercheurs soulignent avec intérêt que la gomme à mâcher traitée à la vitamine K paraît plus efficace que l'eau traitée au fluor, dont on vante beaucoup les mérites.

Délégué Officiel de l'Université de Montréal à Chicago

Le docteur Marcel Archambault, professeur d'endodontie à la faculté de Chirurgie Dentaire de l'Université de Montréal, est allé représenter l'Université de Montréal au Congrès de la Chicago Dental Society, tenu à l'Hôtel Stevens, les 11 au 16 février 1946.

Le Docteur Archambault présentait un exhibit illustrant tout le programme d'enseignement de l'endodontie tel que donné aux étudiants de notre faculté.

Cet exposé a aussi été exhibé aux membres de l'American Association of Exodontists qui étaient réunis en séances plénière à l'issue du Congrès.



By courtesy of Saturday Night.

Servicemen who spent many months in Newfoundland found the streams plentiful with big game fish and of these the king was salmon.

What a fool does in the end, the wise man does in the beginning.



ARNOLD W. MITCHELL, D.D.S.
Montreal, Quebec.

President of Montreal Dental Club.

Acting Chief of the Dental Department of the
Royal Victoria Hospital.

Past President of the Canadian Progress Club
of Montreal.

Past President of the Montreal Sportsmen's
Association.

Past President of the Montreal Professional
Golfers' Association.

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NO. 6

DISCUSSION OF LEGAL PROBLEMS*

by T. L. FISHER, M.D., Ottawa, Ontario

BY no means all the legal problems faced by the medical and dental professions are the same but there is a basic similarity that may make it possible for me out of my experience with the Canadian Medical Protective Association to outline some general principles leaving to you the application to dental work.

One thing needs to be said by way of introduction. The law does not deal specifically with all the problems that professional people may face. It does lay down general principles by which conduct in particular circumstances may be judged. When a particular case has been decided the judgment becomes a precedent, a guide on the next occasion when a similar problem is presented for decision. Over a period of time such precedents come to have all the force of law. The practice of surgery however is a changing thing and requires changing applications of the law. These cannot be made until the new problems have been presented to our courts for decision and in the interval before that happens it sometimes seems that our work is being guided by outworn precedents. Granted this happens we still must remember that, until the change is made, our work is judged in the light of these precedents.

This is drawn to your attention because occasionally when the Canadian Medical Protective Association gives advice to its members it receives the reply that the advice is not sensible in the light of present conditions.

Nevertheless the Association has to insist, and I need to warn you with respect to some of the things that are to follow, that sensible or not, recent or old, the laws and precedents that exist may be expected to apply until a court has changed them, which means that our conduct must be measured in terms of these precedents and laws.

Our legal obligations begin before we begin practice. Professional education and a license certifying its adequacy are preliminary requirements. Having those, an individual can defend himself successfully against any suit questioning his training or his right to practise. However a man's claim to be able to do specified work may be questioned and by what men claim they can do they themselves set up the criteria by which they will be judged should the occasion arise. If a man says he is a specialist he may be called upon to demonstrate his fitness for his specialty, the facts, for example, that he has had extra training in his specialty, that he possesses more knowledge in his own field than the general practitioner, that he takes enough post-graduate work to maintain his standing as a specialist. If he says he is a general practitioner he may have to demonstrate that his knowledge is sufficient for his work but will not be expected to demonstrate specialized knowledge.

How does the law decide whether the individual, general practitioner or specialist, has sufficient knowledge for

* Presented before convention of Eastern Ontario Dental Association, September, 1945.

the work he professes to do? Most of you would dislike having to decide the point in an individual case. The law's answer to this question is that the individual should be able to demonstrate knowledge equivalent to that of other men doing the same work in the same district. Information about this is obtained by learning from other men doing comparable work what they know of the matter under dispute and how they would have handled a similar case. Thus to defend himself successfully against charges of inadequate knowledge a man must not have made claims for himself that he is unable to fulfil, he must have been improving himself steadily enough that his knowledge remains roughly equal to that of his fellows doing the same work.

Possessing adequate knowledge is not enough. It must be applied with due care and precaution. Specifically this means that the examination of a patient must be reasonably thorough and careful and that in arriving at a conclusion the results of the examination must be used in the light of knowledge in a manner reasonably careful and judicious. Once again the general caliber of the work being done by other practitioners in the same district will be the criterion by which an individual is judged.

It would seem unnecessary to remind you that carelessness in routine things must be avoided were it not for the fact that, in our profession at least and I presume in yours though I have not had the opportunity of discussing this with your defence union, nearly every suit has its origin in ordinary, everyday, inexcusable carelessness. To be not only accurate but fair that word needs definition and perhaps in our thinking should be replaced by the word "negligence." The Oxford English Dictionary defines "careless" as "unconcerned, not solicitous, regardless, having no care of"; also as "not taking due care, negligent, thoughtless, inaccurate." This seems somewhat harsh as a description of what we mean when we speak

of carelessness in a professional sense. Because so often it is a passive not an active thing and so often merely vitiates without destroying the value of the work done; it more often is negligence. To include the meaning of the word careless in its general sense as well as the less harsh meaning when applied professionally a legal definition of negligence supplied me by Mr. E. A. Newcombe, K.C. seems fairer and more inclusive—"An absence of care according to the circumstances." We are all guilty of it from time to time though fortunately it seldom reacts seriously enough on the patient to boomerang on us. Incomplete, inadequate examination, careless actions while working, the failure to keep adequate records and many other things which my knowledge of dentistry does not allow me to specify, any one of these may provide the pitfall that causes trouble.

The question of adequate office records is so important in medical practice that I cannot but feel it may be of similar importance in dentistry. Not only does a written record of work done provide continuity of thought in the treatment of cases and so tend to better treatment but it prevents mistakes. More important after trouble has arisen, adequate records provide the best protection the doctor has against false statements, deliberate or accidental. None of us can remember the details of treatment of every case while a patient consults only one doctor or dentist and so may be able to state his memory of events more convincingly and with more certainty—even when he is wrong! A written record, written at the time of the examination and treatment while memory of events is fresh and accurate, is the surest protection we all have against adverse judgments in malicious and nuisance suits.

Careless talk is always dangerous. Not only can it make trouble worse, it may cause the trouble. The fact that we are handling patients and their problems all day, every day, tends to make their problems rather routine to

us; we could hardly endure the work for long periods of time if that were not so. Yet we must remember that those problems are not routine to the patients, they are matters of great importance; patients expect consideration of them on that basis and accept our remarks and instructions on that basis. Those remarks therefore have to be made carefully or trouble may result.

Then too it should be remembered that, working with people and dealing with human problems, mathematical exactitude is not possible. It is almost literally true that there is no circumstance in the practice of medicine or surgery where the results of treatment can be foretold accurately and surely. So any promise of cure, or any remarks that can be interpreted as a promise, should be avoided. In the simplest procedures unforeseen complications can occur and if the patient feels a promise of a good result has been made trouble for the surgeon may arise. There is, of course, every reason why the doctor or dentist should state fairly to patients the results that may be expected. Patients have a right to that kind of explanation and statement, only then can they decide whether they wish to accept treatment. Such statements should be fair and full, neither overly optimistic nor magnifying the difficulties so patients are frightened into refusing treatment they need, yet they should be general enough that patients cannot feel a good result has been promised.

After trouble has arisen loose talk may be still more damaging. There should be one fair general statement of the cause of the trouble accompanied by whatever advice is felt to be wise and nothing further. Lay persons often cannot assess and weigh surgical facts. Moreover they may not be trying to, they may just be letting the surgeon talk in the hope that he will say something they can use against him later on. Make the one general explanation, make it short and as fair as possible, then refuse further dis-

cussion. If the individual has made up his mind to cause trouble, talk will not stop him and may make matters worse, while if the individual is just threatening for reasons of his own the surgeon's refusal to enter prolonged discussions will bring the trouble to an end faster than anything else. It is surprising how many of us talk ourselves into trouble, literally. Patients come with complaints about minor things, complaints which may be legitimate but which would end with correction of the causes if surgeons did not start talking. By the time a long and involved explanation has been given there is no doubt in the patient's mind that the explanation is designed to cover up a fault and the trouble starts.

All that has been said with respect to talk is doubly true about writing. Written, foolish statements remain on record and nothing can change or explain them. So, do not talk and do not write more than enough to present a situation concisely and fairly. Then quit.

One final thing, do not accept blame for things over which you have no control. In surgical practice, as in anything else, all results cannot be good. Bad results may follow good treatment carefully and skilfully given, and when they do there is no reason for the surgeon to accept blame of which he is innocent. It is probable that dentists, like doctors, get frightened when patients complain or threaten, sometimes without investigating to see if the matter is one for which they may fairly be held responsible, and if patients persist, often accept responsibility they never should have assumed. One case that the Association had to deal with comes to mind. A doctor had done a tonsillectomy on a country patient and had kept her in hospital longer than usual because she said she had bled post-operatively on previous occasions. He saw her daily for a week. She returned to his office a week after going home, her jaw obviously dislocated, and stated the dislocation had occurred

at operation. The surgeon accepted full responsibility, paid all the costs of reduction and then asked the Association to reimburse him. It just did not seem that any surgeon could see a patient for a week and fail to recognize a dislocated jaw so he was told to investigate the complaint further. Then he discovered the patient had dislocated the jaw while she was laughing or yawning some days after her return home but suspected that if she blamed the surgeon he would pay the costs of reduction. And he did! Be sure you are at fault before accepting blame.

Let me finish by citing to you a case of which you are doubtless aware but which is worth describing because it illustrates so many of the things doctors and dentists should never do under any circumstances. In 1943 a patient, while consulting her doctor to complete arrangements for a tonsillectomy, suggested to him that during anaesthesia she should have two teeth removed, teeth which had been bothering her for a long time. Her own dentist was in the Armed Forces so the patient suggested that the doctor's brother, a dentist, be asked to do the extraction. The doctor mentioned to his brother that the extraction had been requested and during the ensuing discussion it was remembered that the date arranged was a holiday. Later, at tea at their mother's home, the arrangements were completed for the morning following the holiday. There was some discussion between the dentist and doctor about the teeth to be removed but neither were the dentist's questions nor the doctor's answers definite and clear. There was however an understanding that the teeth to be extracted were upper teeth and this, indeed was true. The patient failed to consult the dentist before she went into hospital and on the morning of the operation the dentist went to the hospital, enquired where his patient was, learned that the nurse to whom he was talking did not know and sat down in the chart room until the time for operation. When he went to the

operating room the patient already was anaesthetized so the dentist was unable to receive instructions from her. In spite of this the dentist examined the teeth and, having in mind the tea-table discussion when upper teeth were mentioned, told the doctor he felt the upper teeth should come out and also one lower tooth. The doctor assented to the professional advice of the dentist and the dentist proceeded. When the patient woke from her anaesthetic she found herself minus not only her tonsils and the two teeth which had been bothering her but also one lower and the remaining upper teeth. The shock was great enough to prompt an action to recover damages from the doctor and the dentist.

If this talk were to doctors it would deal with the many things the doctor did which were foolish and illegal. You however will be less interested in that than in the dental aspect of the case, so if I confine myself to the dentist's irregularities I trust you will remember that I'm even more conscious of the doctor's and am avoiding them merely to avoid boring you. Further, I am quoting widely from the judgment given by the Supreme Court of Canada.

Dentists, unlike doctors, do many "things to patients which are painful, even exquisitely painful, and which, without consent, would be assault and battery. In the judgment in this case an authority is cited:

"Force to the person is rendered lawful by consent in such matters as surgical operations. The fact is common enough; indeed authorities are silent or nearly so, because it is common and obvious. Taking out a man's tooth without his consent would be an aggravated assault and battery. With consent it is lawfully done every day." Pollock on Torts, 14th ex., p. 124.

The dentist in his testimony implied that the teeth had been removed as a result of his examination and professional judgment that the removal was necessary. Irrespective of any apparent necessity surgery without consent is illegal unless it is necessary to save

life in a patient who, in an emergency obviously cannot give consent. Therefore, in this case the exercise of professional judgment was no excuse for unauthorized surgery. Another extract from this judgment, this time a quotation from Garrison, J. in *Benn v. Parsonnet*, J.J.L.R. 20. at 26, deals with the matter: "No amount of professional skill can justify a substitution of the will of the surgeon for that of the patient."

There was also, some doubt as to the thoroughness of the examination and the accuracy of the dentist's conclusions. The trial judge said:

"On the whole of the evidence I am of the opinion that the dentist has failed to establish by a preponderance of evidence that the condition of the teeth was as he states,

or if it was, that the teeth could not have been successfully treated. I have no hesitation in accepting the evidence of the plaintiff that she had no knowledge of the existence of a condition such as the dentist says he found or of any condition other than she has described. I find it difficult to believe that a condition such as the dentist has described could have been present without her knowledge. The teeth may not have been and probably were not in as good condition as she thought, but on the other hand I am not satisfied the condition was such as the dentist has stated. This examination was hastily made and made, too, on the assumption that she wanted all the teeth out, and that the doctor for some reason wanted them all out."

So the dentist may have been negligent in the exercise of his professional judgment.

SCIENTIFIC ENDODONTIA*

by L. J. FENECH, D.D.S., L.D.S., Windsor, Ontario

ENDODONTIA, as the term implies, is root canal therapy, and it refers to the treatment of the tooth with an infected or non vital pulp. The treatment of pulp tissues following pathosis has been practised from as far back as the first century of the Christian Era, and it has had many advocates and antagonists since that time. It has been in disrepute in the past, not so much due to conditions surrounding the tooth itself but rather to our inability to cope with the problems it presented. Today the dentist has a modern scientific approach to the field of root canal therapy at his disposal through post graduate study in improved technique facilitated by the application of scientific principles of bacteriology and radiography and pathology.

The pendulum is swinging from a one hundred per cent extraction con-

cept to conservative treatment when possible. Our medical confrères are concluding that the removal of devitalized teeth is not the whole answer to the treatment of chronic body ailments. Root canal therapy is a vital necessity in operative dentistry and dental prosthesis can be avoided many times with the practice of this dental health service to a greater degree. The majority of patients prefer to retain the tooth, if possible, and dentists should be able to perform this service in many cases. It might even be suggested that failure to treat successfully many non vital teeth, reflects unfavourably on our ability as dentists.

The dental profession throughout Canada and the United States is active in promoting dental health programs. No one can be in the best of health with neglected teeth. Care of the teeth among other things involves immedi-

*Presented at The Academy of Dentistry, Toronto, November 28, 1945.

iate filling of small cavities which if left alone results in extensive caries and eventually pulp exposures. The prevention of the need for pulp treatment is highly desirable of course. However, if the pulp is involved and the treatment given is extraction, a vicious cycle is introduced. Many teeth so lost are not replaced. An examination of college students in the University of Michigan showed an average of 3.5 missing teeth with no attempt at replacement. This condition permits crippled function, drifting of approximating teeth, extrusion of opposing teeth, periodontoclasia and further loss of teeth.

The manner in which we conduct our practices today will be reflected in our practices tomorrow. An educated patient appreciates the effort behind good dentistry. Such a patient has faith in our ability as dentists; such patients return and refer other patients in appreciation of good dental service. The importance of public and personal health has been impressed, to its fullest extent, especially during these recent war years. People are in a very receptive mood to listen to any story pertaining to their physical well being; and further, with their increased income they are in a position to procure any worthwhile treatment. A decayed tooth extracted is so often not replaced. Could it have been saved?

DENTAL PULP

The dental pulp is a type of connective tissue that is liable to degenerate with even a slight injury. It is unlike most other body connective tissue which is highly resistant to injury and infection by virtue of its ability to repair itself. Consequently every precaution should be taken to avoid any unnecessary injury to the pulp. The overcoming of mechanical, physical, or chemical shock or injury is most desirable. Varying degrees of pain are symptoms in pulp trouble and guide

the trained dentist in proper procedure. Every effort, at all times, should be made to conserve pulp vitality thus avoiding the need for the more radical pulp surgery.

Before undertaking pulp canal therapy pre-operative x-rays are necessary. Patient history both in respect to general health and dental health is desirable. When desensitization is necessary use local anaesthesia by infiltration or nerve block.

BASIC REQUIREMENTS

*The basic requirements for the retention of a pulp involved tooth are: **

(a) Anatomically the tooth must be operable.

(b) The health and age of the patient must be satisfactory to justify the case.

(c) The canal must be capable of being rendered sterile and the dentine surgically sterile.

(d) The sterile canal and dentinal tubuli must be hermetically sealed with substances of known tissue tolerance from coronal pulp area to the end of the root.

(e) Dentist must be ensured of satisfactory compensation to enable him to be thorough in the entire operation.

Indications for the retention of pulp involved teeth:

(1) Where basic requirements of a pulp involved tooth may be obtained.

(2) Where patient's health justifies conservative root surgery.

(3) In teeth of strategic importance where replacement is either impossible or unsatisfactory.

(4) Where retention is more indicated than prosthetic replacement as in young patients.

*Contra-indications for the retention of pulp involved teeth: **

(1) Anatomically inoperable tooth where basic requirements cannot be obtained.

(2) Where patient's health is questionable.

*The Place of Root Surgery in Operative Dentistry, by R. F. Sommer, D.D.S., M.S., University of Michigan, School of Dentistry, Ann Arbor, Michigan.

(3) Where periapical pathology cannot be reached by surgical means as sometimes found in multi-rooted teeth.

(4) Where the patient's economic status does not justify the expense.

The successful management of pulp involved teeth in finality depends on the judgment, skill and experience of the operator in any individual case. The dentist must be capable of successfully applying good technical skill with complete asepsis at all times. In all surgery of the mouth, including exodontia and periodontia, a surgically clean technique is desirable but in endodontia a bacteriologically sterile field of operation as well as surgical cleanliness is demanded. All instruments and dressings are sterilized and maintained sterile so at no time is the chain of asepsis broken.

The field of rubber dam around the tooth and the tooth are sterilized with tincture of mercuric iodine. The rubber dam is indispensable in root canal therapy regardless of the duration of the operation. The use of rubber dam in the past has been a lengthy procedure, but if Young's rubber dam frame is used the application is simplified.

PROCEDURE

All anterior teeth should be opened lingually and not interproximally as a rule. All posterior teeth should have copper bands placed over a broken down crown especially if interproximally involved and the tooth opened occlusally and wide enough to expose the entrance to the root canals. Many failures in root canal service are due to insufficient access and also due to lack of knowledge of the anatomy of pulp canals of teeth. A little experimenting with extracted teeth is of value and certainly not a waste of time.

All root canal instruments are placed in a Kerr's aluminum root canal case including paper points, burs, broaches, files, reamers, etc. and sterilized by dry heat at 160°C. for one hour. Metal instruments are then kept

in Kerr's Sterilizer Wells of Germicidal Metaphen. Broach holders, files, scissors, pliers, explorer, etc. are kept in the same solution. Root canal files are wiped clean after use by passing over a cotton roll, one end of which has been phenolized and when not in use these instruments are placed in the germicidal metaphen well.

With the tooth opened under sterile conditions, the arbitrary length is taken and verified by the exact length of the root which is recorded on the patient's history chart for reference. All files used are the same length, by placing control stops on each. Files are not used in a back and forth action as this method forces debris out of the canal into the apical tissues. The files are gently inserted in the canal the desired length, given a quarter turn to the right and withdrawn. They are wiped off on the end of the phenolized cotton roll and if not reinserted are placed in the metaphen solution. All mechanical cleansing is done by such a rotary movement with germicidal solvent in the canal. This solvent (Kerr's Tri-chlor or Zonite) is carried to the mouth of the canal by cotton pliers and later absorbed by sterile paper points. All instruments follow each other in the following sequence: No. 2 follows No. 1 then No. 3 and No. 4—i.e. the smaller size is always followed by the next larger. No unnecessary instrumentation is done at any time, nor is this operation completed finally until cultures from the canal are negative.

BACTERIOLOGICAL ASPECT

The use of the bacteriological culture tube is important in pulp canal therapy. The pulps in over 57% of pulp exposures, due to extensive caries in cavities or under large fillings, have given positive cultures in a series of clinical studies among students in University of Michigan. These pulps gave reasonably normal vitality reactions and the radiograms indicated no disturbed apical tissues leading to sus-

pected serious pulp involvement. Of course the radiogram does not indicate infection; only the results of infection are shown in tissue change. Therefore cultures are the only safe means of telling us if our treatment is effective in arresting and destroying bacterial growth. The patient and the physician too are impressed by the thoroughness of the treatment backed up by a negative culture. The use of the culture tube then is recommended in every case of pulp therapy, both after the removal of vital pulps and the non-vital. The technique is not difficult to acquire and the equipment need not be expensive.

In medicating the pulp canal, the fine end of a paper point is cut off and inserted in the canal which has previously been mechanically cleansed. Germicide (campho-para-mono-chloro-phenol) made by Calkins Fletcher Drug Co., or Ransom Randolph Co., Ann Arbor, Michigan, is carried to the canal with sterile cotton pliers. The paper point soon becomes saturated and the excess is removed by a sterile cotton pellet. The paper point dressing is then sealed to place with sterile cotton pellets and with gutta percha and covered with cement to ensure perfect sealing.

FILLING CANALS

When two consecutive negative cultures, 48 hours apart, are obtained, the canal is ready for filling. Then the final instrumentation is done with files No. 5 and No. 6 or the largest files indicated in the case following the same technique previously described. The canal is finally dried by inserting a moderately hot control plugger until no hissing sound is evident. Then a sterile medium sized gutta percha point of approximate length with tip cut off is chosen and placed in the canal as a trial point and an x-ray is taken. If it is shown in the x-ray negative that the point reaches snugly to the apical end the relation of the other end to the incisal edge is noted.

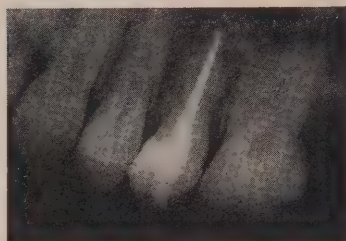


FIG. 1
2—No. 6 Silver Points

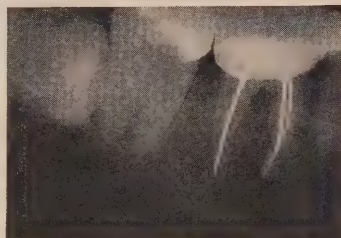
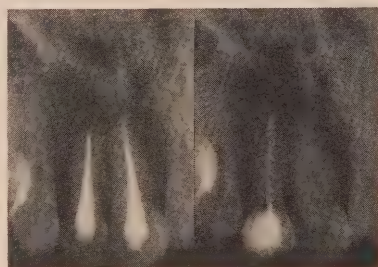


FIG. 2
Restoration not completed
2—No. 3 Silver Points Mesial Canals,
1—No. 5 Silver Point Distal Canals.



June 1944

FIG. 3
Root Resection

Dec. 1945

Remove the point, cut off one millimeter from the point and set aside. Kerr's pulp canal sealer is now mixed ready, then the point already tested for length and size is used to pump the paste into the canal, finally pressing it home to the position occupied when the x-ray was taken. A root canal

spreader is now used and fine gutta percha points are inserted until the canal is thoroughly filled. The excess is then removed to the cervical level of the tooth, the area is cleaned with alcohol and sealed over with a light coloured silicate cement. An x-ray is again taken for final examination.

The use of silver points has helped to simplify root canal fillings in maxillary and mandibular molars and bicuspid teeth and also lower anterior teeth. Silver points can be obtained in the same diameter as the files. Thus after using a No. 3 file, use a No. 3 point etc. When a file penetrates to the apex of a root it naturally fits snugly so if it is followed by the same number silver point it also will fit snugly. The lower anterior teeth may require a No. 4 or No. 5 point; in molars some canals take a No. 3 and others No. 4 or No. 5. It has been found that the use of these points simplifies the technique of filling the roots of these teeth. (Fig. 1. 2. 3.)

In conclusion it is suggested that dentists consider the possibilities resulting from graduate study in Endodontia leading to an improved conservative dental health service.

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13. Injuries to the Teeth of Children—R. G. Ellis, B.D.S., D.D.S., M.Sc., R.C.D.S.

ACKNOWLEDGEMENT

In preparing this paper, I claim little originality. It represents a teaching resulting from post-graduate studies at the W. K. Kellogg Foundation, Root Canal Surgery Department in 1944-45, Ann Arbor, Michigan—complemented by assistance and suggestions given to me from Dr. R. F. Sommer of the above institution and also from Dr. L. F. Krueger, Associate Professor of Operative Dentistry, Faculty of Dentistry University of Toronto.

Medical Arts Building, Windsor.

ANNOUNCEMENTS

Convention of New Brunswick Dental Association

The 51st Annual Convention of the New Brunswick Dental Society will be held at the Admiral Beatty Hotel Saint John, N.B., September 16 and 17—Dr. S. K. Wetmore, Sec., 147 Germain St., Saint John, N.B.

Montreal Dental Club

The 22nd Annual Fall Clinic under the auspices of the Montreal Dental Club will be held in the Mount Royal Hotel on October 23-24-25, 1946. As hotel accommodation will again be limited, it is advisable that immediate application be made to the Hotel for reservations.—M. L. DONIGAN, *Chairman*, 1414 Drummond St., Montreal, Quebec.

The Forum

THE CARE AND HANDLING OF HYPODERMIC EQUIPMENT

by RALPH B. MUNN, D.D.S.

Speaker at Winter Clinic Luncheon in Toronto

The proper care and handling of hypodermic armamentarium in a dental office is a matter of prime importance. If, on completion, a denture (gold inlay or silicate filling) which your dentist has made has proved unsatisfactory, the error can be corrected very easily. This is accomplished by making the piece of work over again. But an error in technique in the sterilizing of syringes and needles is quite another matter. Once the injection has been made, there is no such thing as correcting an error in our chain of asepsis. That particular injection is there and it is there to stay. Let's not forget the responsibility we have with regard to our patients.

In the minds of many, the proper method of sterilization of syringes and needles is still a moot question. Sterilization by the use of chemicals is increasing in popularity and unquestionably there is a need for this method. Autoclaving has always been found dependable but sterilization by boiling is the one employed by the majority of dentists.

The scrubbing, with hot soapy water, of all syringes and needles prior to their being placed in the sterilizer is worthy of our most serious consideration. Frequently instruments remain on the tray for some time after their use permitting saliva, serum, blood, even pus, to dry and adhere to them. Unless these substances are removed by mechanical cleansing prior to sterilization, it is conceivable that we may have a sterile instrument but one that

is actually unclean. We should remember too that sterilization is not so readily accomplished by *any* method when bacteria are given the protection of these dried body proteins.

What should we do with the syringe and needle after sterilization in order that we may have them ready for instant use? Increasing in favour are the "keeping solutions". The ideal solution of this type is an antiseptic of high germicidal and bacteriostatic potency and one that is compatible with oral tissue. Syringes and needles kept in this sort of solution are taken directly from their container and need no further attention until employed in the injection.

It is difficult to reconcile our careless handling of the hypodermic syringe in the presence of the patient. We should never forget that many of our patients come to us not because they want to but because they have to. Pain drives many of them to our office but certainly the fear of pain has kept many of them away. Their attitude toward us and the things which we use deserves much more than mere casual attention. The hypodermic syringe with its long and rather foreboding-looking needle is still to many patients the most menacing-looking instrument used in a dental office. So, let's not make it too conspicuous but instead keep it in the background until it is actually needed.

—*Bul. of Ont. Dental Nurses' and Assistants' Asso., Jan., 1945.*



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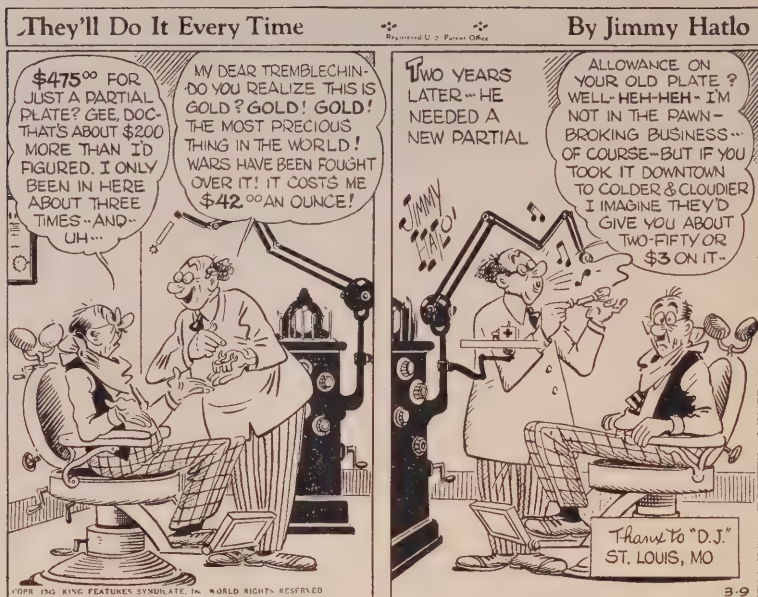
A SERIOUS SIDE OF DENTAL PRACTICE

The cartoon published in connection with this editorial presents a problem which cannot be passed over lightly by the dental profession. The fact that a cartoon is drawn on this subject at all, makes one pause and consider. The difficulty is that the message is only too true. To put it bluntly, many of us have been selling merchandise instead of emphasizing our service from a health standpoint and unless we change our attitude, a condition may arise which will cause us much trouble, to say nothing of injury to our professional pride.

It is so much easier to convince the patient of the value of a bridge or denture by showing him a beautiful model of highly polished gold construction or the beauty of plastics over vulcanite or the value of a filling made of gold as compared with silver instead of passing over the question of materials and discussing the service to be rendered, the aesthetics to be obtained, and above all, the function so greatly to be desired if a condition of health is to be maintained.

We should do everything possible to avoid emphasizing the merchandise appeal and instead, stress the value of our prosthetic appliances and our tooth restorations as a service necessary to masticate our food, improve our digestion, curtail the ravages of infection, and so build up the body health.

The dentist must make the diagnosis. He must give full directions to the technician. He must keep in mind continually the biological side of



prosthetic service. Furthermore, only by this means can we hope to keep dentistry on a high professional plane.

General Arnold's second Report on the Army Air Forces of the U.S.A. is a dramatic document. The Report brings out clearly as stated in *Atlantic Monthly*, the dependence of air power upon civilian economy, upon science, invention, and research. "Psychological tests for airmen, aviation medicine, new type of aluminum runways, flak suits, mobile weather stations, radar, the extraordinary one-day, ten-day and thirty-day compacs—all these are part of what is really a combat story. To produce and keep one airplane in the air, to keep on improving it, and to use it to the best advantage—this requires more than a certain number of men; it requires a certain type of society."

To practice dentistry on a high biological and professional plane, also requires a certain type of society. We must see to it that greater emphasis is placed upon the encouragement of the right type of young men and women to enter the dental field. Then with such a personnel, it will not be difficult to reach the *ne plus ultra* of our professional ambitions.

The Dutch Empire of the East covers a land area larger than Germany, France, Spain, Portugal, Belgium and Switzerland combined. Its population is nearly 70,000,000. Of these, almost two-thirds are in the island of Java. This is the most densely populated region of its size on earth.—Marc T. Green in "Asia."

BOOK REVIEW

The Dentist's Own Business, by Arthur A. Campbell, D.D.S. Published by the Blackiston Company, 215 Victoria Street, Toronto. 113 pages. Price \$4.25.

A definite need is fulfilled with the publication of this book. The contents are concise without being padded with generalities and platitudes. The subject matter is based upon actual experience as gained in practice and by a great many interviews with successful practitioners.

All phases of the business side of dental practice are covered and suggested forms for every purpose are given. In the past many dentists have paid a large sum of money to individuals for courses in dental economics

and did not begin to receive the concise information given in this publication.

The book is designed for the use of all dental practitioners. As stated in the introduction it is not intended to give ready made answers on all points but rather to furnish a study whereby the reader can apply the principles which fit in with his own philosophy. "There is an approach to the subject that is correct from the economic angle, both for the patient and the dentist, and this approach need not savour of commercialism." At this time when so many of our members are returning to civilian practice from military service, this book is opportune and should supply real assistance in making the necessary adjustments.

DON W. GULLETT.

DENTAL CORPS NEWS

DIRECTORATE OF PUBLIC RELATIONS

LONDON, England—With strength scaled down to ten dental officers and their assistants, No. 18 Canadian Base Dental Company continues to watch over the dental health of officers and men of all R. C. A. F. Establishments on the Continent and the United Kingdom.

Under the command of Lt.-Col. G. B. Shillington, Toronto, the company maintains a ratio of one dental officer to every 500 airmen on a station. Each officer has one dental assistant and a driver-orderly working with him. A dental mechanic, who builds false teeth, casts gold inlays and handles other skilled works, divides his services between two officers.

During the height of the R. C. A. F. activity, the Dental Company had a strength of approximately 75 officers, who, with their assistants, served in all theatres of war where R. C. A. F.

Personnel were to be found. Since that time, a steady policy of repatriation, scaled to coincide with R. C. A. F. requirements, has reduced the number to ten.

During a recent six month period when the strength of No. 18 Company's dental officers was in the vicinity of 20, an average of 5,800 operations a month were carried out. This makes an average of 290 operations per month per officer, or roughly fifteen operations by each officer every working day. It was explained that an "operation" can mean anything from an x-ray examination to a large-scale extraction.

The modern dental officer is up-to-date on the latest methods and materials, and the service provided by the dentists of No. 18 Company rivals that of the ablest civilian practitioners.

W. A. SHIELDS, S/L
Chief Public Relations Officer
for Chief of the Air Staff.

It is generally allowed that no man ever found the happiness of possession proportionate to that expectation which excited his desire and invigorated his pursuit; nor has any man found the evils of life so formidable in reality as they were described to him by his own imagination. Every species of distress brings with it some peculiar supports, some unforeseen means of resisting or power of enduring.—Samuel Johnson.

DENTAL CORPS NEWS

SUPPLEMENTARY LIST OF CANADIAN DENTAL CORPS OFFICERS, MAY 1

RETIREMENTS

Rank, Name and Date	Civilian Address	Rank, Name and Date	Civilian Address
Col. J. F. Edgecombe, 27-3-46	Saint John, N.B.	Major F. S. Mills, 9-3-46	Whitby, Ont.
Capt. J. A. Folkins, 27-3-46	Fredericton, N.B.	Capt. J. H. Mullett, 8-3-46	Toronto, Ont.
Capt. A. M. Laporte, 20-2-46	Edmunston, N.B.	Capt. J. E. C. McGowan, 29-3-46	Toronto, Ont.
Capt. L. W. Walker, 2-4-46	Moncton, N.B.	Capt. C. H. Neisky, 8-3-46	Toronto, Ont.
Capt. J. P. A. Cabana, 26-3-46	Yarmouth, N.S.	Capt. W. O. Noble, 27-3-46	Newmarket, Ont.
Capt. J. F. Comeau, 26-2-46	Yarmouth, N.S.	Capt. M. C. Parks, 26-3-46	St. Catharines, Ont.
Capt. S. R. Seetner, 12-2-46	Kentville, N.S.	Capt. B. Pattenick, 5-3-46	Toronto, Ont.
Capt. F. Auger, 13-3-46	Victoriaville, Que.	Capt. J. E. Peterson, 22-3-46	Stratford, Ont.
Capt. A. H. Hall, 12-3-46	Hampstead, Que.	Capt. E. M. Rey, 28-3-46	Toronto, Ont.
Capt. J. A. Beaulieu, 12-3-46	Montreal, Que.	Capt. M. N. Rockman, 25-3-46	Toronto, Ont.
Capt. J. M. Begin, 28-2-46	Granby, Que.	Capt. E. W. Sadler, 26-1-46	Waterloo, Ont.
Capt. J. Boissoneault, 28-3-46	Thetford Mines, Que.	Capt. C. A. Shaffer, 7-3-46	Ft. William, Ont.
Capt. G. A. Bonin, 26-3-46	Montreal, Que.	Capt. W. A. Shand, 8-3-46	Toronto, Ont.
Major E. C. Burbank, 22-3-46	Montreal, Que.	Lt.-Col. O. G. Shepherd, 12-3-46	Sudbury, Ont.
Capt. A. F. Cameron, 19-3-46	Montreal, Que.	Capt. B. R. Shuken, 11-2-46	Toronto, Ont.
Capt. R. Chapdelaine, 22-1-46	Montreal, Que.	Capt. G. E. Smockum, 19-3-46	Clinton, Ont.
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Capt. W. J. W. Hodgins, 27-3-46	Shawville, Que.	Capt. G. W. Spinks, 7-3-46	Hamilton, Ont.
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Capt. C. K. LeBlanc, 14-3-46	Sherbrooke, Que.	Capt. H. L. Yack, 12-3-46	Hanover, Ont.
Capt. J. Olivier, 27-3-46	Joliette, Que.	Capt. C. Ames, 4-3-46	Winnipeg, Man.
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Capt. W. V. Ferguson, 4-4-46	Lindsay, Ont.	Capt. H. J. Dombrowski, 20-3-46	Cadomin, Alta.
Capt. K. R. Galvin, 21-3-46	Toronto, Ont.	Capt. K. M. Gordon, 23-3-46	Vermilion, Alta.
Capt. J. M. Garrett, 5-3-46	Sarnia, Ont.	Capt. R. S. Gray, 12-3-46	Calgary, Alta.
Capt. D. G. Goffin, 21-3-46	St. Catharines, Ont.	Capt. M. Krasnoff, 12-3-46	Hilda, Alta.
Capt. R. G. Grainger, 21-3-46	Hamilton, Ont.	Capt. M. Panar, 9-3-46	Calgary, Alta.
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Capt. J. Kulyk, 12-3-46	Toronto, Ont.	Capt. F. Katz, 14-3-46	Vancouver, B.C.
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CANADIAN DENTAL ASSOCIATION NEWS

(FROM THE OFFICE OF THE SECRETARY)

Annual Dental Students' Register

The Annual Dental Students' Register is herewith presented in the form of five tabulations.

The effect of the accelerated program instituted during the war is apparent in that certain classes are missing, 2.1% of the undergraduate students are women.

The intensification of a dental program for children would appear to enlarge the field for

women graduates appreciatively. The great bulk of returned men who have entered the study of dentistry are in the pre-dental years and consequently their numbers do not appear in this tabulation.

The pre-dental years of all schools are filled to capacity and the increase of numbers in the professional years will be shown more drastically the next following years.

TABLE 1

TOTAL ENROLMENT OF UNDERGRADUATE STUDENTS IN THE DENTAL SCHOOLS OF CANADA AS OF FEB. 15, 1946

University	Freshmen	Sophomores	Juniors	Seniors	Men	Women	Total
Dalhousie University	8	9	10	0	27	0	27
McGill University	34	20	18	1	72	1	73
University of Montreal	59	47	34	44	182	2	184
University of Toronto	74	0	48	58	173	7	180
University of Alberta	26	12	16	0	53	1	54
TOTAL	201	88	126	103	507	11	518

TABLE 2

MAXIMUM NUMBER OF UNDERGRADUATE STUDENTS THAT CAN BE ACCOMMODATED IN A CLASS

Dalhousie University.....	10
McGill University.....	35
University of Montreal.....	60
University of Toronto.....	200
University of Alberta.....	40
TOTAL.....	345

TABLE 3

RECAPITULATION OF UNDERGRADUATE ENROLMENT IN THE DENTAL SCHOOLS OF CANADA—1939-1945 INCLUSIVE

School	1939-1940	1940-1941	1941-1942	1942-1943	1943-1944	1944-1945	1945-1946
Dalhousie University	36	31	25	25	22	28	27
McGill University	60	58	61	67	67	51	73
University of Montreal	90	104	118	139	154	162	184
University of Toronto	222	210	232	270	255	264	180
University of Alberta	56	51	49	53	24	34	54
TOTALS	464	454	485	554	522	539	518

TABLE 4

TOTAL NUMBER OF GRADUATES DURING THE YEARS 1939-1945 INCLUSIVE

School	1939	1940	1941	1942	1943	1944	1945
Dalhousie University	15	12	7	8	11	6	8
McGill University	17	13	18	9	26	12	13
University of Montreal	16	23	14	31	18	37	30
University of Toronto	49	56	45	40	103	61	58
University of Alberta	18	13	13	32	8	24	7
TOTALS	115	117	97	120	166	140	116

TABLE

**DISTRIBUTION OF UNDERGRADUATE STUDENTS BY PROVINCES
AND FOREIGN COUNTRIES IN THE DENTAL SCHOOLS OF CANADA
AS OF FEBRUARY 15, 1946**

School	Pr. Ed. Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	Br. Columbia	United States	Newfoundland	Br. West Indies	Panama	Haiti	Australia	New Zealand	Total
Dalhousie University	2	21	2	..	..	..	..	..	..	..	2	..	..	..	..	..	27
McGill University	3	4	6	37	5	2	1	..	1	4	1	9	..	..	..	..	73
University of Montreal	1	2	7	161	5	2	1	..	..	2	..	..	1	2	..	..	184
University of Toronto	..	1	1	1	131	10	15	2	15	..	..	1	..	..	1	2	180
University of Alberta	..	..	..	..	..	3	20	20	11	..	..	..	..	..	..	..	54
TOTAL	6	28	16	199	141	17	37	22	27	6	3	10	1	2	1	2	518

Table 2 records the maximum number possible that may be accommodated in Canadian Dental Schools in one class. Some 345 applicants can be taken care of in any one year according to these submitted figures. Theoretically, depending upon the number of failures, it would appear possible for the dental schools of Canada to have in attendance approximately four times this number in any one year.

In Table 3 it will be observed that the greatest number of dental students, during recent years, were in attendance during 1942-43. Classes in all schools are larger this year than at that time but the total number in attendance is less owing to the blank classes as shown in Table 1.

Comparison of the number of graduates (Table 4) year by year with the loss of personnel is important. As recently published, the loss by death and retirement during 1945 was given at 93. The number of graduates in 1945 from Canadian schools was 116, an increase of 23. It is to be anticipated that retirements will increase during the next two or three years due to the fact that older members of the profession have carried on during the war beyond normal time of retirement. This factor may mean a stationary or slight temporary decrease in total personnel which will

be overcome eventually by the large classes now entering the pre-dental years.

The distribution of undergraduate students now in the dental schools is worthy of study (Table 5). The ratio of students in dentistry to population of the province concerned is not consistent by any means. Based upon the 1941 census, the ratio of number of students in attendance at Canadian dental schools to provincial population, from best ratio to the most scant is in the following order: Prince Edward Island, Quebec, Nova Scotia, Saskatchewan, Ontario, New Brunswick, British Columbia, Alberta, Manitoba. The number of students from Ontario is comparatively low this year which is accountable from the fact that no second year exists at the time of the census in the dental school at Toronto and for the same reason the numbers are diminished in two or three other provinces. British Columbia would have a much higher ratio to population if those students from that province attending dental schools in the United States were added. (According to the usual average figure of those students from British Columbia in United States dental schools, British Columbia would have the third best ratio of students this year). 4.8% of the students in attendance in the dental schools of Canada are outside Canada.

CANADIAN DENTAL ASSOCIATION NEWS—(Continued)

Dominion Dental Council

At the biennial meeting of the Dominion Dental Council, held in the Royal York Hotel, Toronto, on May 25-28, the following officers were appointed—

President—Dr. A. E. Proctor, Winnipeg, Man.

First Vice-Pres.—Dr. H. L. Freeland, Calgary, Alta.

Second Vice-Pres.—Dr. F. C. Bonnell, New Brunswick.

Sec.-Treas.—Dr. A. J. Brett, Regina, Sask.

Representatives on the Council:

Dr. G. H. Campbell, Orangeville, Ont.

Dr. Emery Jones, New Westminster, B.C.

Dr. Heath McIntyre, Charlottetown, P.E.I.

Dr. W. C. Oxner, Halifax, N.S.

At the several sessions many changes were made to so raise the standard of the examinations that Dominion Council certificates will be accepted in *all* Provinces and thus make this a truly National Examining Board.

Many amendments were made to the Constitution and By-laws, but the following two are of particular interest.

Resolutions:

1. "That after August 1, 1946, the Dominion Dental Council shall refrain from

accepting the clinical examinations of senior students at recognized dental schools, and upon production of satisfactory evidence of graduation from such a school, shall conduct all clinical examinations as separate examinations".

NOTE: The final marks awarded in the Senior year at college will not be accepted by the Dominion Dental Council as equivalent to the regular clinical examination which must be taken as a separate examination after graduation.

2. "The Dominion Dental Council of Canada shall consist of one representative of the dental profession of each Province, elected or appointed by the incorporated dental registering body in each Province, which agrees to accept the standards of the professional examination and certificate of qualification for dental surgeons issued by the Dominion council *after the first day of January following the year in which that Province enters the Dominion Dental Council*, without further examination".

NOTE: British Columbia, which was accepted recently, will be required to register only those certificates issued after January 1, 1946.

NEWS FROM THE PROVINCES

ALBERTA

Post Graduate Course in Dentistry for Children

On May 1 and 2, a clinic on Children's Dentistry was given in Calgary. Dr. Stuart A. MacGregor of Toronto spoke on the strategy of handling children, cavity preparation, space maintenance, pernicious mouth habits, treatment of fractured and broken anterior teeth and many other phases of children's dentistry; Mr. G. M. Dunlop spoke on "Child Psychology"; Dr. Max M. Cantor addressed the gathering on "A Critical Analysis of the Cause of Dental Caries"; Dr. C. M. Burnap discussed "General Anaesthesia for Children"; Dr. R. R. McIntyre dealt with "Preventive Orthodontia for Children"; and

Dr. W. Scott Hamilton spoke on "Local Anaesthesia and Minor Surgery for Children". All speakers were excellent; in fact, they were outstanding.

At the banquet Monday evening, Dr. Harry Thompson, Secretary of the Canadian Dental Hygiene Council gave a splendid address on "The Future of Dentistry". About seventy men were present and considered this address one of the best they had heard in years.

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Calgary Dental Society

At the April 8 meeting of this Society, Mr. W. H. Pickup, Secretary of the Calgary and District Druggists' Association spoke on "Penicillin".

SASKATCHEWAN**Children's Dentistry**

On April 27 the Saskatoon Dental Society was host to the Children's Clinic, sponsored by the Canadian Dental Association, Canadian Dental Hygiene Council, and the Saskatchewan Dental Council.

Dr. S. A. McGregor of Toronto established himself very acceptably with the forty men who attended, and inspired one and all not only in the field of dentistry for children, but in all phases of dentistry. He made everyone feel that he was going to put forth greater efforts to do better work and endeavour to place dentistry on a higher plane. His subjects were: 1. Child Management; 2. Interception of Malocclusion; 3. Ectopic Eruption.

Dr. S. R. Laycock of the Faculty of Education, University of Saskatchewan spoke on the subject "Problems in Doing Dental Work for Children," and Dr. Hope Hunt, Dean of Household Science of the same University, considered the question of foods. Dr. Sheps, Assistant Deputy Minister of Public Health spoke on behalf of the Premier on "Health Services for the People".

We consider that those responsible for organizing this tour are to be heartily commended and we hope that a meeting of this kind may become an annual event which would mean much for the unity of the profession and for better dentistry.

Considering also the Clinic in Regina, 80 members attended the sessions. L.D.H.

Regina Dental Society

At the last meeting of this Society, forty dentists heard Premier T. C. Douglas outline the Government's Health Policy with emphasis on the role to be played by dentistry.

Lt. Col. Terry Cooke, now in charge of the city's Dental Clinic, was welcomed from overseas. Dr. A. D. Baker, a newcomer to the Society, was also welcomed.

The following officers were elected for the ensuing year: President, Dr. J. M. Riffell; Vice-President, Dr. Ben Bookhalter; Sec.-Treasurer, Dr. Campbell Dixon.

Saskatoon Dental Society

The members of this Society tendered a farewell dinner for Dr. Harold Carson who had practised here since 1919. He served in

the Dental Corps in the First Great War. He has been an ardent supporter of the Society and will be greatly missed by all. We wish Dr. and Mrs. Carson every happiness in their new home at the West Coast.

MANITOBA**Manitoba Dental Association**

From the standpoint of attendance, close attention and interest in the subject under discussion, as shown by the number who remain until the end, the dentists of Manitoba invariably receive favourable comment from the clinicians who come here to give refresher or post-graduate courses.

In keeping with the trend of the times toward the subject uppermost in the dental world in Canada is Children's Dentistry. In the past few months post-graduate courses have been given across the Dominion. Manitoba has had two prominent specialists in pedodontia giving lectures in the past month. Dr. G. W. Teuscher, of Northwestern University was brought to Winnipeg by the Winnipeg Dental Society on March 25 and Dr. Stuart MacGregor of Toronto was here on April 22 and 23. Dr. MacGregor came under the joint auspices of the Canadian Dental Hygiene Council, The Canadian Dental Association, the Manitoba Dental Association and the Manitoba Department of Health and Public Welfare.

Due credit for the dominion-wide attention to this, the most important of all dental subjects must be given to the Canadian Dental Hygiene Council which for over a quarter of a century has preached the doctrine of Mouth Health which is the objective of Preventive Dentistry. We all know who has been the driving force of the C.D.H.C. Dr. Harry Thomson, the Field Secretary, has been a frequent visitor to Western Canada and the oftener he comes the greater our respect, admiration and affection for him becomes.

Winnipeg Dental Society

The Annual election of officers of the Winnipeg Dental Society held on April 29 resulted in the selection of the following: President, Dr. Thos. F. Blight; Vice-Pres. Dr. H. J. Lawrence; Sec.-Treas. Dr. W. I. Jackson; members of executive committee Dr. C. S. McLeod and Dr. B. A. Oja. The retiring officers of whom Dr. P. H. B. Wood

was president, used this occasion to give a welcome-home dinner to members of the Society who had served with the Canadian Dental Corps in the recent World War. A very enjoyable evening resulted and made a fitting termination to the 1945-46 season's meetings.

Winnipeg Dental Nurses and Assistants' Association

This Association held the final meeting of the 1945-46 season on May 6.

The annual reports were read by the retiring Executive and the new Executive was introduced and installed.—President, Miss Ethel Brown; Vice-President, Miss Kay Hof-fard; Secretary, Miss Mary Davidson; Treasurer, Miss Marilyn Roland; Program Con- vener, Miss Jane McClure; Membership Con- vener, Miss Margaret Kitching; Editorial Convener, Miss Aili Lappalainen; Social Con- vener, Miss Martha Livingston; Sick and Visiting, Miss Therese Frey; Military Hos- pital Visiting, Miss Margaret Gilbert.

The remainder of the evening was en- joyably spent playing novelty whist, under the direction of Miss Martha Livingston, the social convener.

JANE MCCLURE.

ONTARIO

London Dental Society Honours Doctors Reid and Gullett

On April 13, Dr. Harvey W. Reid and Dr. Don W. Gullett, President and Secre- tary respectively of the C.D.A. were guests of the London Society with Dr. Gillies pre- siding. This engagement marked the close of a very successful tour across Canada pre- senting the problems and achievements of our National Association before dental audi- ences everywhere in the Dominion.

This meeting was the wind up and our popular President and Secretary were happy in a duty well done. However a pleasant surprise was in store. Truly Dr. Stephen Moore and Dr. Frank Giffen were eloquent in presenting these worthy Canadian officers to the dentists assembled from all parts of Western Ontario.

After an address of eulogy and apprecia- tion for a task well done, Dr. S. M. Kennedy presented both Dr. Reid and Dr. Gullett, with

a beautiful Sheffield Tray suitably inscribed, and thus bringing to a close a delightful evening.

Toronto Ladies Auxiliary

Mrs. R. W. Matchett presided at the an- nual luncheon of the Ladies Auxiliary to the Academy of Dentistry and Canadian Dental Corps in April.

Dr. H. C. Bliss, President of the Academy, brought greetings.

Mrs. Andrew J. McDonagh was presentec with a life membership in recognition of long and outstanding service to Dentistry. The presentation was made by Mrs. F. L. Dayment and was the first of its kind to be given by the Auxiliary.

On behalf of the Auxiliary Mrs. A. E. Webster presented Mrs. R. W. Matchett with a bouquet of spring flowers on her retire- ment as President.

The sum of \$100 was voted to the "Save the Children Fund" and a similar amount to the "War Amps' Project". Reports showed that in the war period \$3,230 had been realized from scrap gold. Clothing, hos- pital supplies, knitted articles and hundreds of boxes have been sent overseas. Since the war 108 troop trains have been met.

The Executive for 1946-47 is as follows: President, Mrs. L. R. Davison; 1st Vice-Presi- dent, Mrs. M. G. Boyes; 2nd Vice-President, Mrs. H. J. Mullett; Recording Sec., Mrs. A. F. Cooper; Corresponding Sec., Mrs. S. M. Richardson; Treasurer, Mrs. L. M. Grose; Councillors, Mesdames F. J. Conboy, A. B. Sutherland, R. G. Ellis, R. E. Johnston, C. I. Treadwell.

MARGUERITE BOYES, PRESS CONVENER

QUEBEC

Resolution read by Dr. J. S. Dohan at the Meeting of the Montreal Dental Club on April 15.

WHEREAS, death has visited us and taken from us, on March 25, one of our beloved charter members, Dr. T. D'Arcy Tansey, and

WHEREAS, In the passing of Dr. Tansey we have lost not only one of our charter members, but a professional gentleman of high standing who was a pioneer in the formation and support of our club and

WHEREAS, in his death we and the profession at large have lost one of our foremost representatives, whose unflinching integrity and professional ability during his long professional life had the highest qualities of a sound, progressive practitioner. Therefore,

BE IT RESOLVED, That the Montreal Dental Club extends its sincere sympathy to Mrs. Tansey and her family in their bereavement which is the bereavement of the whole profession, and expresses the regard of the profession for Dr. Tansey who exemplified the highest ideals of dentistry, and be it further

RESOLVED, that a copy of this resolution be spread upon a special page of our official minute book, that copies be sent to the dental journals, and that a suitably inscribed copy be sent to his family with our profound sympathy.

Montreal Dental Club

A general meeting of this Club was held on April 15.

The clinician for the evening was one of the members, Dr. R. E. Dagg who presented a most interesting clinic on Full Denture Construction. He based his presentation on a review of the clinic given by the Nebraska Denture Study Group at last year's fall clinic. With the aid of models he described the construction of full dentures from the impressions to the finished dentures in a most comprehensive manner.

The addition to the Club roster of many new members, lately released from the Services has added greatly to the interest and enthusiasm of the regular meetings.

Montreal Endodontia Society

At the April meeting of this Society Dr. A. G. Racey, Assistant Professor of Oral Pathology at McGill University and Professor of Oral Pathology at the Université de Montréal, spoke on "Pathology of the Periapical Area". He traced in a most graphic way just what happens to tissues in this area in cases of acute and chronic periapical abscesses. Too often it may be that root

canal therapy is practised without the operator having a definite mind picture of what has occurred pathologically in the diseased area.

The first annual meeting of the Society was held on May 7. Keen interest has been shown by the members in the many clinics and presentations given throughout the past year.

Case reports with slides were presented by Drs. Archambault, L. J. Rosen, A. D. Richardson and H. H. Pearson.

Officers of the Society for the ensuing year are: Honorary President, Dr. Ralph Sommer, Ann Arbor, Michigan; President, Dr. Marcel Archambault; Vice-President, Dr. H. H. Pearson; Secretary-Treas. Dr. S. A. MacSween; Ex-Officio, Dr. A. D. Richardson.

Mount Royal Dental Society

The annual meeting of this Society took place in the form of a dinner meeting on May 7.

Election of officers for the ensuing year resulted in the following being chosen: President, Dr. M. Levitt; Vice-President, Dr. M. Goldenberg; Secretary, Dr. B. Bernfeld; Ass't. Secretary, Dr. S. Hershon; Treasurer, Dr. I. Druckman; Executive Committee, Drs. G. Zimmerman, P. Gitnick, L. Laing, L. Epstein and M. L. Simon.

Montreal Dental Nurses' Association

The regular monthly meeting of this Association was held on April 15.

The guest speaker was Mr. W. McTavish of The National Refining Co. Ltd. of Toronto. His subject was "Oil as a Means of Cleaning, Sterilizing and Lubricating". The speaker made this into a most interesting subject and gave many practical hints that could be carried out in the daily routine of the dental office.

A representative of the Blue Cross Hospital Association also addressed the meeting outlining the work of that Association and the benefits to be derived from it. It was decided by the meeting to join up with the Hospital Association as a group.

Bring me a worm that can comprehend a man, and I will show you a man that can comprehend God.—John Wesley.

EMPIRE NEWS

GREAT BRITAIN

National Health Service Bill

A call to the Profession from the Council of the British Dental Association.

Condensed from Br. D. Jour., Apr. 5, 1946.

Neither the Teviot Committee, in spite of many excellent recommendations, nor the Ministry of Health has shown any appreciation of our historical background, or of the light that it throws on what is necessary for the future, or of the danger of cutting the cords that connect us with the past.

The Minister of Health is arbitrarily proposing to take over the Profession. We are in danger, if we are content to maintain an ineffective defensive attitude, of being put into a position from which it will be extremely difficult to extricate ourselves. If the profession is to surmount this danger we must resist, and the time to make plain that we do not intend to be dominated by any Minister or any Government is now. Let us consider a likely course of events. The Government passes an Act which in several respects is unacceptable to the profession. The profession, as one man, refuses to take any part whatever in the scheme for a National Dental Service. What happens next? We have the welfare of the public at heart and acknowledge our responsibilities. In return we want their support. When the Act comes into operation, we should continue to see and treat patients but would accept no fees from the Government, only from the patient. No patient would be refused treatment. Temporary sacrifices by practitioners would, no doubt, be necessary, particularly by some sections of the profession, but they would be abundantly worth while and would give no opportunity for anyone to say that, in our

own interests, we were victimizing the public. There would be no strike. A vociferous demand would go up from the public that benefit for which it was compulsorily paying should be provided. That stage would not be reached. The Government would appreciate the situation long before and negotiations, having become imperative, would be opened.

Let no practitioner, wherever he may practise, imagine that by taking a firm stand now he is endangering his livelihood. The fundamental facts are that there is a vast amount of dental work waiting to be done and that the dental profession is the only channel through which it can be carried out. If we are weak we shall find ourselves doing it under strict bureaucratic control. If we are strong we shall retain the proper measure of control and independence to which we are morally entitled.

The Council has therefore called for immediate meetings of Branches open to the whole profession and the Press, and seeks an overwhelming pledge that they will refuse to practise under any Government scheme of National Dental Service which is incompatible with the fundamental principles enunciated by the Consultative Committee and with the general policy adopted by the British Dental Association and approved by large numbers of the profession as a whole.

The testing time has come. The solidarity of the Dental Profession in the national interest must be demonstrated now. Not a part only, but the voice of the whole profession must be heard. No practitioner should absent himself. His attendance is his paramount duty.

(Signed) A. P. HUSBAND,

*On behalf of the Council of the
British Dental Association.*

GENERAL NEWS

Fluorine

The American Geographical Society has submitted a reprint from "The Geographical Review", Vol. XXXVI, No. 2, 1946, p. 177-193, entitled "Fluorine in United States Water Supplies", by Anastasia Van Burkalow. In an accompanying statement the Society signifies that "this topic was chosen as a pilot project" in a broad program of the study of

the distribution of some diseases as related to the natural and social environment.

They state furthermore, "the American Geographical Society hopes ultimately to prepare an Atlas of Diseases, to serve as a tool of research rather than a textbook".

The purpose of this initial investigation of the fluorine content in United States water supplies is designed to show the general dis-

tribution of fluorine in the water supply and the relationship between the fluorine in the water and the source from which it is derived. Numerous tables are included and four maps of the United States are used to illustrate the types of water supplies analyzed, the fluorine content in analyzed water supplies, both communal and non-communal. As an important aid to research workers in this field, these maps will undoubtedly be of value even in their preliminary form.

April 23, 1946

R. G. ELLIS.

National Committee of Dentist Co-operating with the National Physicians Committee for the Extension of Medical Service

This Committee has solicited funds from members of the American Dental Association (not officially supported by A.D.A.) to oppose the enactment of the Wagner-Murray-Dingell bill. The statement of the committee indicated that it hopes to collect \$75,000.00 from dentists for this purpose.

DENTAL ALUMNI MEETING AT PORTLAND, OREGON

by Mande Spence Holway, D.D.S.

Some forty Canadian dentists attended the Alumni meeting of the University of Oregon Dental School. This annual meeting, discontinued for the duration of the war, was resumed this year, and will be again held yearly.

Dr. Harold J. Noyes, new dean of the School, speaking at the banquet, stated that the school's policy is to train men, both those already established and those entering dentistry, and to develop new knowledge in den-

tistry. Dr. Herbert Miller, Dean Emeritus said he had recently celebrated his eighty first birthday. Dr. Miller was born in Hamilton, Ont. In 1898 he founded the North Pacific College of Oregon, School of Dentistry, which in 1945 became the University of Oregon Dental School.

Among interesting clinics were those by Dr. Roy West on Practical Oral Surgery and Local Anaesthetic Injections. Dr. West, of the Oral Surgery Department of the College, is well known throughout Canada.

The clinics and lectures covered every field of dentistry, including endocrinology and hypnotism. They were attended by over six hundred and fifty dentists.

Such meetings enable dentistry to formulate its own future policies.

U.S.A. Veterans Dental Program

New plans of the Veterans Administration to enable an estimated 16,000,000 discharged war veterans to receive dental treatment from their own dentists at government expense were praised by the American Dental Association. The Veterans Administration is also giving considerable attention to attracting qualified dental personnel to the Civil Service. A new salary scale commensurate with training and experience has been established. This scale ranges from \$3,640—\$4,300 for junior grade officers to \$7,175—\$8,225 for senior grade officers. Plans for establishing cooperative programs for graduate and post-graduate training between the agency's hospitals and the dental schools are also under way.

Key point in the new plan is free choice of dentist for each veteran. Formerly, the veteran had to choose from a limited list approved by the agency or go to a VA hospital.

IN MEMORIAM

John J. Brown, of Wingham, Ontario, aged 76, died April 26. He was graduated from the Royal College of Dental Surgeons in 1896, and practised at Woodstock until his retirement in 1942 due to ill health.

He was a charter member of Woodstock Y.M.C.A., Masonic Order, and Wingham United Church.

Dr. Brown is survived by his widow, a son and two daughters.

John Ferguson Grant, of Durham, Ontario, died April 9. He had practised in Durham for forty-one years. He was a member of Knox United Church and for fifteen years served as superintendent of its Sunday School. He was also a past district deputy grand master of the Masonic Grand Lodge of Canada in Ontario. He served as Mayor of the town of Durham.

Dr. Grant is survived by his widow, one son, two daughters and two brothers.

Le Journal

DE L'ASSOCIATION DENTAIRE CANADIENNE

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Mes Souvenirs*

par EUDORE DUBEAU, D.D.S., L.C.D., B.Sc.

Lorsque le Dr Gérard de Montigny, directeur et conseiller de votre Association, m'a demandé, en votre nom, de venir rencontrer les membres de la Conférence Bourdon, j'ai été heureux d'accepter cette occasion de parler à des anciens élèves, dont j'ai gardé un excellent souvenir; j'ose espérer qu'il en est ainsi pour vous, à mon égard, même ceux qui ont pu trouver parfois ma discipline un peu sévère.

J'ai dit au Dr de Montigny: "Etant retiré de l'enseignement, quel sujet voulez-vous que je traite?" Il m'a répondu: "La profession dentaire, la fondation de l'Ecole, la Fédération dentaire internationale, les sommités dentaires que vous avez rencontrées dans vos voyages en Europe, et vos souvenirs, en général."

Evidemment, au cours de mes quarante années à la Faculté de Chirurgie Dentaire de l'Université de Montréal, j'ai vu bien des choses, rencontré un grand nombre de professionnels intéressants, dont je pourrais parler bien longuement et à ma grande satisfaction, car j'ai conservé de très agréables souvenirs. Je vous parlerai donc, un peu à bâtons rompus, touchant brièvement plusieurs sujets.

Tout d'abord, lorsque le Dr Lussier, alors étudiant, est venu me consulter, en 1941, au sujet de la création d'une Association d'études parmi les élèves de la Faculté, inutile de vous dire que je l'en ai félicité. A sa mention qu'il l'appellerait "La Conférence Bourdon" j'ai été enchanté, car la chose constituait un réel

hommage au Dr J. H. Bourdon, qui fut le dentiste professionnel par excellence, chez les Canadiens-français de son époque.

J'ai été l'élève du Dr Bourdon au début de mes études dentaires. Il n'existait pas d'Ecole dentaire à cette époque, et les étudiants devaient alors s'enregistrer chez un dentiste et y faire une cléricature, comme les étudiants en droit le font encore dans un bureau d'avocat. Le Dr Bourdon recrutait sa clientèle parmi l'élite de la société montréalaise; il était très ponctuel pour les rendez-vous avec ses patients. Je devais aller dîner de midi à une heure et demie; un jour je suis revenu à une heure et trente-cinq minutes. Il ne dit rien, mais en souriant, il regarda l'heure à sa montre; j'ai bien compris ce que cela signifiait et je n'ai plus jamais été en retard. Cela vous explique, messieurs les étudiants, pourquoi après avoir été formé de la sorte, j'ai été exigeant pour la ponctualité, envers vous. En clientèle, soyez ponctuels avec vos patients et de même en toutes choses, car c'est la clef du succès.

Le Dr Bourdon a été le secrétaire de la première Ecole dentaire bilingue, les cours étaient donnés en français et en anglais, par des professeurs différents. Elle fut fondée en 1892 et était située au Carré Phillippe, angle de la rue Cathcart où se trouve aujourd'hui la maison Birks. C'était une vieille maison à deux étages; l'Ecole occupait le deuxième étage; il y avait deux anciennes chaises de barbier comme

*Causerie prononcée par le Dr Eudore Dubeau, au Cercle Universitaire, le 22 novembre 1945, devant les élèves finissants de la Faculté de Chirurgie dentaire, membres de la Conférence Bourdon.

fauteuils dentaires, une chambre pour les cours; la cuisine servait de laboratoire pour vulcaniser les dentiers. Peu de patients y venaient, mais par contre, l'étage inférieur étant habité par un vendeur de livres usagés, nous avions beaucoup de coquerelles; aussi les étudiants préféraient-ils travailler au bureau de leur précepteur. Lors d'un cours auquel j'étais présent, un bon vieux dentiste anglais qui nous enseignait la pathologie, demanda à un étudiant: "When you cut an artery, what happens?" L'élève répondit: "Blood comes out" — "Very good", dit le professeur, "but why does the blood come out?" Et l'élève de répondre: "Because there is a hole in it." C'était peu poli, mais le professeur qui craignait l'élève, celui-ci étant un peu rude, pour ne pas dire davantage, répondit habilement: "Very good" et l'incident fut clos.

Comment suis-je devenu dentiste? Sorti du Collège Ste-Marie, chez les Pères Jésuites, avec mon diplôme de bachelier, j'hésitais entre la médecine et la dentisterie (à ce moment-là on ne parlait pas de chirurgie dentaire). Deux semaines après ma sortie du Collège, je rencontre mon professeur de physique, un vieux Jésuite de France, qui me demande: "Dubeau, qu'allez-vous faire?" — "Je crois, mon Père, que je vais étudier la dentisterie." Il me répond: "Pourquoi pas médecin-jual? (cheval)" La médecine vétérinaire à cette époque, n'était pas hautement considérée, à cause du grand nombre de charlatans qui l'exerçaient.

Humilié et désappointé de voir la dentisterie si peu en honneur, je décidai d'étudier la médecine et la dentisterie conjointement. Mon diplôme de bachelier fut accepté par le Collège des Médecins pour l'admission à l'étude, mais le Bureau des Dentistes le refusa; c'était le premier diplôme de bachelier qui leur était présenté. On me référa au Dr Desrosiers, secrétaire de la Faculté de Médecine, homme très aimable, qui était l'examineur du Bureau des Dentistes, pour l'admission à l'étude. En voyant mon diplôme de bachelier, il sourit, trouvant la chose ridicule. Pour la forme, il me demanda: "Vous savez lire et écrire, vous

connaissiez l'arithmétique?" — "Oui" — "C'est très bien, vous êtes admis à l'étude de la dentisterie, et cela coûte un dollar pour le certificat." Lorsqu'on me demandait ce que j'étudiais, je répondais: "la médecine"—j'avais honte de dire: la dentisterie; mais finalement après deux années de médecine j'ai opté pour la dentisterie et je ne l'ai jamais regretté. Mais je crois avoir le droit de dire que, durant ma carrière, j'ai travaillé à en relever le niveau professionnel.

Laissez-moi vous dire en passant, que les dentistes de la province de Québec ont été incorporés en profession par la Législature de Québec, en 1869. Ceux de la province d'Ontario l'avaient été en 1867, c'est-à-dire deux ans avant nous.

L'Ecole dentaire du Carré Philippe, que j'ai décrite tout à l'heure, était bien rudimentaire, mais c'était un point de départ, et nous devons beaucoup de reconnaissance à ceux qui ont eu le courage de se dévouer à son organisation. Cette école a été par la suite transportée à l'angle des rues Ste-Catherine et St-Laurent, coin nord-ouest, où elle est demeurée jusqu'en 1902.

Je faisais alors partie du corps professoral et j'y enseignai la pathologie dentaire. L'Ecole était outillée convenablement; elle possédait un surintendant dévoué, le Dr L. J. B. Leblanc. Cette école bilingue disparut en 1902.

Après de longs pourparlers, l'Université Bishop, dont la faculté dentaire est aujourd'hui abolie, et l'Université Laval, consentirent à recevoir les dentistes. L'Université McGill y consentit plus tard; alors que les dentistes de langue anglaise laissèrent l'Université Bishop, pour se joindre à McGill.

L'Ecole dentaire de Montréal fut incorporée par la Législature de Québec en 1903, et affiliée à l'Université Laval, la même année; elle acheta tout le matériel de l'Ecole bilingue et le transporta dans l'édifice du journal "La Patrie", angle des rues Ste-Catherine et Hôtel de Ville, où elle installa sa clinique, sous la direction du Dr A. Labelle. L'Université Laval nous donna des salles pour les cours et l'administration, dans son immeuble de la rue St-Denis.

En 1906, grâce à la générosité du re-

gretté Mgr Gaspard Dauth, alors Vice-Recteur, elle déménagea à l'Hospice St-Joseph, coin des rues St-Hubert et DeMontigny; c'était une amélioration, mais insuffisante pour le nombre d'étudiants qui augmentait. Cet édifice fut démoli en 1912 pour faire place à la belle Ecole dentaire qui a été inaugurée à cet endroit, en 1913. Durant la reconstruction, l'Ecole fonctionna au petit bonheur, dans la partie supérieure d'un magasin, coin Ste-Catherine et St-Christophe, local aujourd'hui occupé par la Maison Dupuis Frères.

En 1920, lors de la fondation de l'Université de Montréal, l'Ecole fut transformée en Faculté, et le nombre des étudiants atteignit 210. De 1904 à 1920, l'Ecole dentaire de Montréal fut financée uniquement par les trois incorporateurs, les Drs Joseph Nolin, J. G. A. Gendreau, et Dubeau.

En octobre 1942, elle entra dans le nouvel immeuble de l'Université de Montréal, Boulevard Mont-Royal, où comme vous le savez, elle peut rivaliser avec la plupart des écoles dentaires américaines, aussi bien pour l'enseignement que pour son installation matérielle, qui s'améliorent constamment. J'en suis des plus heureux, car on ne passe pas quarante ans dans une institution qu'on a vu naître, sans y être attaché profondément et sans souhaiter qu'elle continue de grandir. Aussi, je félicite la Faculté actuelle pour les améliorations qu'elle y a apportées, et je souhaite que l'Université de Montréal puisse mettre à sa disposition l'argent nécessaire, pour ce qui reste à accomplir.

ASSOCIATION DES ECOLES DENTAIRES D'AMERIQUE

C'est une association dont font partie toutes les Ecoles dentaires des Etats-Unis et du Canada. Il y a un congrès chaque année, dans des villes différentes, pour discuter les questions et modes d'enseignement, et aussi pour voir le fonctionnement de l'Ecole ou des Ecoles de l'endroit, ce qui est très intéressant. Il y a quarante Ecoles dentaires aux Etats-Unis et cinq au Canada, dont deux à Montréal, une à Toronto, une à Halifax

et une à Edmonton. Toutes les Ecoles sont affiliées à une université, et ce sont les universités qui par une contribution annuelle, défrayent les frais d'administration. En 1926, l'Association a eu sa réunion à Montréal, et le regretté Monseigneur Georges Gauthier, archevêque de Montréal et ancien recteur de l'Université, avait convié tous les délégués à un banquet au Cercle universitaire, geste qui avait été hautement apprécié par les délégués américains, surtout.

CONSEIL DENTAIRE DU DOMINION

C'est une organisation composée de chirurgiens-dentistes qui, après un examen spécial, accorde à des dentistes diplômés des différentes provinces du Canada, un diplôme donnant le droit d'exercer leur profession dans les provinces qui font partie de ce Conseil.

Toutes les provinces, à l'exception de la province de Québec et de la Colombie Britannique, en font partie. Pourquoi ces deux provinces n'en font-elles pas partie?

La province de Québec, dont les dentistes pour les quatre-cinquièmes sont de langue française, voyant peu de débouchés pour eux dans les autres provinces, s'y est toujours opposée. Quant à la Colombie anglaise, elle en a fait partie durant quelque temps, mais elle s'est ensuite retirée; je ne connais pas la raison qui l'a fait agir ainsi.

Le jury d'examen est composé de dentistes des provinces qui font partie du Conseil.

DECOUVERTE DE L'ANESTHESIE

Horace Wells, humble dentiste de Hartford, Connecticut, mais chercheur scientifique, est le découvreur de l'anesthésie au protoxyde d'azote, appelé par les Américains le "Laughing gas".

En 1844, il fut appelé par des savants de Boston, pour démontrer l'efficacité de son procédé, au Massachusetts Hospital.

Dans l'amphithéâtre où il y avait une grande affluence de médecins et d'étudiants, Wells administre le gaz, extrait une dent, et le patient après l'extraction, fait devant l'assemblée, les gestes les plus extraordinaires et il semble convulsionné

par la douleur. Qu'était-il arrivé? Probablement un cas d'idiosyncrasie. Wells se retire au milieu des murmures et des quolibets de l'assistance.

Il retourne à Hartford, découragé, malade; se associé, Morton, essaie de lui enlever sa découverte et son prestige et il y réussit partiellement. Il continue tout de même son travail dans l'obscurité, débile, malade, et le 14 janvier 1848, ne pouvant plus supporter la lutte, il s'ouvrit les veines dans son bain, en respirant des vapeurs d'éther.

Le même mois de sa mort, comme si l'injustice humaine succombait sous le poids accablant de son oeuvre, la vérité surgit. La Société médicale de Paris, de concert avec l'Académie de Médecine de Paris, rédigea le procès-verbal suivant:—"A Horace Wells, de Hartford, Connecticut, Etats-Unis d'Amérique, revient l'honneur d'avoir découvert, et d'avoir appliqué ensuite, l'usage de vapeurs dans les opérations chirurgicales, pour supprimer la douleur." Et il fut élu membre honoraire de la Société. Les dentistes de Paris, Français et Américains, ont fait ériger dans le Square des Etats-Unis, à Paris, tout près de l'Arc de Triomphe, un monument à la mémoire de Horace Wells. Je ne me rappelle pas exactement en quelle année, mais j'avais l'honneur d'être présent; j'ai même pris une photo du monument et je regrette de n'avoir pu la retracer pour vous la faire voir.

La ville de Hartford, à la suite de la décision de l'Académie de Médecine, a placé une plaque commémorative dans un parc de la ville. A l'exception du Dr G. V. Black, ancien doyen de l'Ecole dentaire de l'Université de Northwestern, à Chicago, à qui on a élevé un monument dans le Parc Lincoln, à Chicago, je crois que Horace Wells est le seul dentiste à avoir un monument, surtout sur un sol étranger.

FEDERATION DENTAIRE INTERNATIONALE (F.D.I.)

Le nom le dit, c'est une organisation dentaire de tous les pays, fondée à Paris en 1900, lors de l'Exposition mondiale, sous la présidence du Dr Charles Godon,

Directeur de l'Ecole dentaire de Paris, et maire-adjoint du Quartier de l'Opéra.

J'étais présent, c'était mon premier voyage en Europe, mais j'y suis retourné 18 fois depuis cette date, la dernière fois en 1937, prenant part à des congrès dentaires à chaque voyage, et cela toujours à mesfrais, sans aucune subvention de l'Université.

La F.D.I. n'est pas un corps législatif; elle est composée de dentistes délégués par tous les pays qui désirent en faire partie; elle délibère sur toutes les questions d'intérêt général pour la profession, et adopte des résolutions qui sont transmises aux différents pays par leurs délégués respectifs.

Elle a un congrès général tous les cinq ans, mais le Conseil exécutif, composé de délégués de chacun des pays, siège chaque année dans un pays différent. Sept congrès pléniers ont eu lieu depuis 1900, en France, à Paris deux fois; en Angleterre, 1 fois, à Londres; en Allemagne, 1 fois à Cologne; en Belgique, 1 fois à Bruxelles; au Danemark, 1 fois à Copenhague; en Autriche, 1 fois à Vienne; aux Etats-Unis, 1 fois à Philadelphie en 1926. J'ai eu l'avantage d'assister à tous les congrès pléniers, excepté celui de Vienne. J'ai pris part aussi à plusieurs réunions annuelles du Comité exécutif, en ma qualité de secrétaire de la Commission d'Education.

Lors du Congrès plénier de la F.D.I. à Paris, en 1931, la Faculté de Chirurgie dentaire de l'Université de Montréal, était représentée par plusieurs de ses professeurs qui y ont présenté des travaux, les Dr Théo. Côté, J. A. Pinault, Paul Geoffrion, Alcide Thibaudeau, Paul E. Poitras, et moi-même.

La F.D.I. a rendu de grands services à la profession, car elle a mis en contact les maîtres de la Chirurgie dentaire des différents pays et elle a contribué à élever notre niveau professionnel auprès des gouvernements, et vis-à-vis le public en général.

Il est certainement à propos de mentionner ici que le Dr J. H. Burkhart, de Rochester, N.Y., un des délégués des Etats-Unis à la F.D.I., était le dentiste de monsieur Eastman, président de la Eastman Kodak Company, de Rochester; il

avait obtenu de son richissime patient un don de cinq millions de dollars pour l'érection de cinq cliniques dentaires gratuites pour enfants, à être érigées dans cinq pays, à la discrétion de la F.D.I. Le choix fut difficile, car monsieur Eastman avait statué que le million devait être employé uniquement pour la construction et l'équipement de la clinique, les villes où seraient érigées ces cliniques devant s'engager à payer à perpétuité tous les frais de fonctionnement, y inclus salaires des cliniciens, infirmières, etc. Elles ont été construites en Angleterre, à Londres; en Italie, à Rome; à Stockholm, en Suède; en France à Paris, et en Belgique, à Bruxelles, où j'ai eu l'avantage d'assister à l'inauguration par le roi Léopold. J'ai pu aussi visiter toutes ces cliniques; elles sont luxueuses, magnifiquement outillées, car il fallait dépenser le million, et elles sont bâties dans des quartiers populeux et ouvriers où elles peuvent rendre les plus grands services. Elles ont toutes été épargnées par la guerre, excepté la clinique de Londres qui a été légèrement endommagée par les bombardements.

FRANCE — ODONTOLOGISTES ET STOMATOLOGISTES

Le progrès de la profession dentaire, en France, a été beaucoup retardé par la lutte entre médecins et dentistes. Les dentistes, c'est-à-dire les odontologistes, diplômés des écoles dentaires françaises, dont trois à Paris, une à Lyon et une à Marseille, décernent un diplôme de dentiste, après un cours de quatre années, mais sans doctorat.

Les stomatologistes sont des médecins exerçant la chirurgie dentaire, et qui prétendent que pour permettre d'exercer cette profession, l'Etat devrait exiger un diplôme de "Docteur en médecine". Donc, ils ont fondé à Paris, l'Ecole de Stomatologie qui décerne un diplôme de "Docteur en Stomatologie" aux médecins, après un cours de douze mois dans cette petite Ecole où il y a une clinique dirigée par des médecins.

Les médecins, étant plus nombreux que les dentistes à la Chambre des Députés, en France, ont réussi jusqu'à

maintenant à empêcher les dentistes d'obtenir la création d'un "Doctorat en Chirurgie dentaire"; c'est pourquoi des dentistes européens viennent en Amérique chercher un doctorat; un bon nombre sont venus dans ce but suivre les cours et cliniques à la Faculté de Chirurgie dentaire de l'Université de Montréal, où, après avoir suivi ces cours et cliniques comme les élèves réguliers et passé avec succès l'examen final, ils sont retournés chez eux avec le "Doctorat dentaire".

En France, celui qui possède un doctorat d'un autre pays doit le mentionner à la porte de son cabinet, et je vous avoue qu'à Paris ou ailleurs en France, quand j'allais visiter nos anciens élèves, et que je lisais le nom de l'Université de Montréal, j'éprouvais une joie facile à comprendre pour nous, Canadiens-français.

Tous les médecins en France, peuvent exercer comme dentistes; un grand nombre, sans expérience, engagent un mécanicien et font une concurrence déplorable aux dentistes, nuisible au progrès de la profession dentaire.

Les stomatologistes ont même demandé au Parlement d'abolir le diplôme de dentiste, afin qu'il n'y ait que les médecins ayant le droit d'exercer la chirurgie dentaire. Il y a eu une lutte formidable au Parlement, et grâce au Dr Marquet, dentaire, ministre dans le cabinet et maire de Bordeaux, que j'ai bien connu, un grand orateur, il a été décidé par le Parlement de poser la question suivante à l'Académie de Médecine, sa décision devant être finale: "Est-il opportun que les diplômes de dentistes et de stomatologistes continuent d'exister séparément, ou doit-on abolir le diplôme de dentiste et exiger celui de médecin-stomatologiste, pour exercer la chirurgie dentaire?"

La Faculté de Médecine, après un long débat, a décidé que les deux corps devaient continuer d'exister indépendamment l'un de l'autre; et, conséquemment les Ecoles dentaires de France continuent d'exister et décernent le diplôme de dentiste, mais sans doctorat en chirurgie dentaire.

Durant la guerre de 1914, le dentiste enrôlé dans l'armée avait droit au grade

de caporal seulement, tandis que les médecins pouvaient atteindre à tous les grades. Le Dr Antoine Blatter, directeur adjoint de l'Ecole dentaire de Paris, a dû, en 1914 monter la garde durant plusieurs mois devant une usine. Son patient, l'amiral Lacaze, ministre de la Guerre, l'aperçut un jour, et le transféra à un emploi, à l'intérieur de son ministère. En 1939, au début de la seconde guerre, les dentistes furent promus au grade de sous-lieutenant, et le Dr Villain, directeur de l'Ecole dentaire de Paris, a rempli cette fonction durant toute la guerre, au Ministère de la Santé. Une lettre reçue de lui récemment m'informe que les Allemands n'ont pas fermé l'Ecole durant la guerre; mais aucune dépense n'ayant été permise, elle est actuellement dans un état déplorable.

ECOLE DENTAIRE DE L'UNIVERSITE
HARVARD A BOSTON — COURS
COMBINE POUR LE DIPLOME
DE MEDECIN-DENTISTE

A plusieurs reprises dans le passé, on a préconisé un cours de cinq années qui conférerait le degré de médecin-dentiste. Il y a cinq ans, l'Université de Harvard, à Boston, qui possède une Ecole dentaire de grande renommée, a tenté le projet. Toutes les Ecoles dentaires d'Amérique se sont déclarées en opposition à ce projet, prétendant qu'il en résulterait une incompétence marquée chez médecins ou dentistes. On croyait généralement qu'un grand nombre d'étudiants suivraient ce cours; ce fut une déception, sept élèves seulement s'enregistrèrent la première année, six, la deuxième année et cinq seulement, la troisième année.

Au banquet du 75ème anniversaire de l'Université Harvard, il y a deux ans, auquel j'avais le plaisir d'assister, le Président de l'Université, le Dr Conant, fit une courte déclaration qui surprit grandement les 700 convives qui s'attendaient à avoir de longues explications au sujet de ce cours combiné. Il dit: "Gentlemen, it has been a failure, that is all; we have decided to go back to the old system of separate medical and dental courses." Cet essai a définitivement

réglé cette question; il faut que les facultés médicales et dentaires existent séparément, tout en collaborant étroitement dans leur enseignement, pour leur avantage mutuel et aussi pour celui des étudiants.

CENTENAIRE A L'UNIVERSITE DE
BALTIMORE — FONDATION DE
LA PREMIERE ECOLE DENTAIRE

En 1940, au mois de mars, eut lieu à Baltimore, Maryland, la célébration du Centenaire de la première Ecole dentaire en Amérique, dans la ville de Baltimore par les Drs Chapin A. Harris et Horace Hayden.

Bien que ces deux hommes fussent des praticiens de grande valeur, qui par la suite ont écrit des livres remarquables sur la dentisterie, l'Ecole débuta avec difficulté, car ils durent faire face à de l'animosité de la part du corps médical; cependant ils triomphèrent.

Les fêtes du Centenaire, organisées d'une façon merveilleuse, congrès multiples, exposition rétrospective de la dentisterie, durèrent une semaine avec une assistance de dix mille dentistes.

La Faculté dentaire de Montréal était représentée par les Dr Paul Geoffrion et Paul E. Poitras, notre historien dentaire, qui avaient charge de notre exposition rétrospective, et moi-même chargé par le Comité d'Organisation de Baltimore, de faire l'historique de la Fédération Dentaire Internationale, ayant assisté à sa fondation à Paris, en 1900.

(à suivre)

Don des finissants "46" à l'Université de Montréal

Avant de laisser la Faculté de Chirurgie Dentaire, les diplômés ont tenu à souligner leur gratitude en offrant une série de volumes scientifiques modernes. Ces livres seront à la disposition des professeurs et des élèves, à la bibliothèque de la Faculté.

Médication Pré et Post-Opératoire*

Par A. C. VOISARD, D.D.S., L.C.D., Montréal.

La période pré-opératoire est l'époque désignée pour préparer la réussite d'une opération, dans son cours et dans ses suites. Il est toujours sage, important et prudent de la part du chirurgien et du patient, d'avoir un examen médical complet, avant toute intervention chirurgicale. Il est imprudent d'opérer en présence d'infection ou de maladies telles que: diabète, angine de Vincent, infections aiguës, septicémies, anémies, leucémies, hémophilies, troubles de la circulation et de l'organisme en général.

EXAMEN PHYSIQUE

Tout patient, jeune ou vieux, a le droit à un certain examen médical avant toute opération. Il n'est pas nécessaire d'avoir un examen complet pour une opération mineure, un examen sommaire suffit.

La coopération du médecin doit être recherchée. L'usage du stéthoscope est important avant l'anesthésie, mais un examen physique plus complet du patient peut révéler des choses importantes au chirurgien.

L'état général du patient doit être étudié. Le chirurgien cherche à découvrir certaines habitudes. L'alcoolique est toujours un sujet, qui réagit mal à l'anesthésie générale. Celui qui ne prend qu'un verre à l'occasion, pourra trouver du courage, dans un verre de boisson, mais il supportera peut-être plus difficilement l'anesthésie. Le pouls doit être pris soigneusement. Sa vitesse est moins importante que son rythme et sa force. Ces deux derniers facteurs sont déterminés par la palpation de l'artère radiale du poignet. La pression artérielle radiale du patient donne la pression du pouls, et la pression systolique et diastolique, est un signe important sur l'état de santé du patient.

Si la chose était possible, dans chaque cas, on tirerait beaucoup de profit à con-

naître la formule sanguine (hémoglobine, Leucocytes, différentiel), le temps de coagulation et le temps de saignement, l'analyse d'urine et l'analyse bactériologique de la salive.

* *Note de la rédaction:* Cette communication n'est pas un exposé complet de la question; elle n'est qu'un résumé d'une conférence présentée par l'auteur.

"HISTOIRE DE CAS":

Madame C., présente une centrale et latérale supérieures entourées de sacs pyorrhéiques. Anesthésie locale et extraction. Deux jours plus tard, l'état de la patiente s'aggrave. Condition locale, bonne. Aspect général, abattu et toxique. Examen du médecin: rien d'anormal. Prescription: aliments liquides. Le lendemain, le patient est dans un coma diabétique. Spécialiste trouve quantité abondante de sucre dans les urines."

Si la patiente était décédée sans diagnostic de diabète, on aurait mis en cause les extractions dentaires et le dentiste aurait été blâmé. La phase la plus importante de nos interventions chirurgicales est un bon diagnostic.

SOINS DU PATIENT

L'atmosphère d'une salle d'opération influence le patient au point de vue psychologique. Tout ce qui choque l'oeil, tels, des tampons souillés de sang, des serviettes malpropres, des instruments non rangés, des restes d'opérations précédentes, des bruits qui dérangent; des négligences dans la mise du chirurgien ou de son assistante; une façon d'agir inconvenante de la part du dentiste; une mauvaise installation du patient; un éclairage et un chauffage défectueux; tous ces détails modifient l'attitude du patient vis à-vis l'opération et nuisent à l'anesthésie. On devra conduire le patient à la toilette, afin de prévenir tout ennui. Le

patient pourra au même moment desserrer ou enlever tout vêtement qui gêne la circulation.

CONTROLE PSYCHIQUE DU PATIENT

Tous les instruments doivent être préparés à l'avance et recouverts d'une serviette. Des paroles inutiles nuisent à une bonne anesthésie générale, car le dernier sens à disparaître est celui de l'ouïe. Pas de témoins inutiles. Toute opération, même mineure, a son importance, surtout aux yeux du patient. Le chirurgien et ses assistants doivent être gais et encourageants. Pas de délai inutile.

POSITION DU PATIENT

La plupart des opérations mineures et des extractions dentaires peuvent se faire sur le fauteuil du dentiste. Les patients faibles et ceux qui souffrent de lésions cardiaques sont couchés sur une table. La meilleure position à donner au patient dans un fauteuil, pour une intervention, est la position légèrement penchée, avec la tête fixée solidement, un peu en arrière. Se rendre compte que le patient est assis confortablement, les pieds bien appuyés et les mains serrant les bras du fauteuil. On peut adopter pour tous les cas un plan d'examen radiologique, avant de procéder à l'extraction des dents. Le patient s'y refuse? On note son attitude sur son dossier.

PROTECTION DE L'OPERATEUR

Le dentiste se méfiera de toute anomalie autour des dents, des rapports avec les dents voisines, de la conformation des racines, de leur nombre variable, de leurs inclinaisons mésiale ou distale, de leur apex recourbé ou hypertrophié et de l'aspect de l'os qui les entoure. L'opérateur redoublera d'attention, s'il s'agit d'ostéite, de kystes, de fractures, de néoplasmes, etc.

Pour les extractions de troisièmes molaires inférieures incluses, on devra surveiller les rapports de position entre la dent incluse et le canal dentaire inférieur. Dans les cas d'infection osseuse à la région antérieure, on devra se rendre compte de la proximité du trou menton-

nier et du nerf mandibulaire. En cas de doute, avertir le patient. La même conduite s'applique au sinus du maxillaire supérieur.

TRAITEMENT PRE-OPERATOIRE

La bouche doit être propre. Les obturations branlantes doivent être enlevées au préalable, la bouche vaporisée avec une solution antiseptique d'un goût agréable. Une prophylaxie est de mise avant une extraction générale. Les gencives peuvent être traitées et les obturations terminées. Toutes ces précautions préviennent des complications pulmonaires.

MEDICATION PRE-OPERATOIRE

Avant de prescrire des sédatifs, il faut penser à l'endroit où se fera l'intervention: le cabinet du dentiste ou une salle d'opération d'hôpital. Si le patient est hospitalisé, le médicament de choix est le sulfate de morphine. Pour un malade extrêmement nerveux ou susceptible de souffrir de choc opératoire, nous préférons la morphine. Ce médicament agit bien sous anesthésie locale ou générale. Une opération bénigne ou des extractions chez un patient nerveux est une indication à prescrire un sixième de grain de morphine, une demi-heure avant le travail; cette dose est habituellement suffisante. On doit exercer beaucoup de prudence en donnant cet alcaloïde aux personnes âgées et aux enfants, parce que mal toléré par eux.

Dans un bureau de dentiste, quand l'anesthésie et l'intervention sont de courte durée, des sédatifs ne sont pas nécessaires, à moins qu'on ait affaire à un patient excessivement nerveux, sanguin ou très fort. Pour ces derniers, on ne prescrira pas de la morphine à cause d'un repos très prolongé qui devrait suivre l'opération.

1°: Pour l'anesthésie à l'éther, le sulfate de morphine avec un cent-cinquantième de grain d'atropine est conseillé.

2°: Pour l'anesthésie à l'éthylène, la morphine sans atropine est recommandée; l'éthylène occasionne une sécheresse de la bouche, la soif et bien peu de transpiration.

3°: Sous anesthésie au protoxyde d'azote et à l'oxygène, on prescrira de la morphine, avec ou sans atropine, au choix de l'opérateur. Les patients qui ont une histoire de nausées, causées par l'absorp-

tion de morphine, pourront prendre du pantopon.

On prescrira de préférence, dans le bureau du dentiste, un médicament non narcotique, comme bromures, allonal, veronal, amytal et nembutal.

CHEZ NOUS ET AILLEURS—

Le docteur Joseph Purcell à la Société Dentaire de Montréal

Le conférencier du mois d'avril de la Société Dentaire de Montréal était le docteur Joseph Purcell, de Boston.

Le docteur Purcell avait choisi comme titre de sa conférence: "Prothèse Dentaire Supérieure Complète sans Voûte Palatine."

Le conférencier présenta une méthode ingénieuse de confectionner des dentiers complets rétentifs sans voûte palatine et cette présentation fut fort goûtée de l'assistance.

L'Association des Dentistes d'Ottawa

Le Dr Paul Côté a été élu président de l'Association des dentistes d'Ottawa, au cours de leur 49e dîner annuel, auquel assistaient 150 dentistes, au Château Laurier.

Le Dr Harvey Reid, de Toronto, président de l'Association Dentaire Canadienne, rappela que c'était l'agréable devoir de leur Association d'aider les dentistes revenant à la vie civile après la guerre.

Le Dr Sid Bradden adressa des félicitations aux dentistes, qui ont été décorés par sa Majesté, le Roi, pour services rendus à leur patrie, au cours du récent conflit mondial. Ce sont: le Lt-col Georges Hutchison, E.D., le Lt-col Ken Baird, O.B.E., et le major Aluk Rogers, O.B.E.

Anciens Présidents de l'Association Dentaire Canadienne Décorés.

A l'occasion de la visite du président, le Docteur Harvey Reid, à Montréal, au

mois de mars, l'Association a décerné à trois de ses anciens présidents la médaille des anciens présidents de l'Association.

Cette médaille est une reproduction de celle, qui est portée par le président en exercice, lors des cérémonies officielles de l'Association. Ces trois anciens présidents dont les services éminents ont été officiellement reconnus par la profession dentaire, sont les docteurs Eudore Dubeau, Joseph Nolin et Arthur L. Walsh.

Leur décoration leur a été remise à l'Université de Montréal, où les dentistes étaient réunis à l'occasion du passage des docteurs Harvey Reid et Don Gullet, à Montréal.

Finissants à l'Université de Montréal

Les élèves finissants de la Faculté de Chirurgie Dentaire de l'Université de Montréal, cette année, sont au nombre de quarante-quatre.

Ces nouveaux dentistes s'établiront dans différents centres de la Province de Québec, d'Ontario et du Nouveau-Brunswick. Voici la liste de ces nouveaux confrères, dont les noms sont suivis de l'endroit, où ils ouvriront leurs cabinets: April, Gérard: Gaspésie; Bachand, André: S.-Jean, Québec; Baillargeon, Maurice: Ste-Anne des Monts, Gaspé-Nord; Beaudoin, Fernand: Trois-Rivières; Bédard, Guy: Montréal; Bélair, Jacques: Pointe-aux-Trembles, Montréal; Bengle, Otto: Montréal; Bernier, Louis: Québec; Brazeau, Conrad: S.-Polycarpe; David, René: S.-Hyacinthe; Delaney, Cecil: Montréal; Dubé, Léo-Paul: Québec; Ducharme, Anathase: Joliette;

Dufresne, Yves: Trois-Rivières; Fortin, Giles: Thetford-les-Mines; Gendron, Roland: Montréal; Girouard, Charles-Edouard: Moncton; Guilbert, Emile: Montréal; Hamel, Bernard: Acton Vale; Hébert, Charles: Shawinigan Falls; Hotte, Gonzague: Montréal; Huot, Jean: Hawkesbury, Ont.; Huot, René: Québec; Laberge, Gérard: Montréal; Lachapelle, Guy: Montréal; Lachapelle, Jean-Paul: Montréal; Laforce, Jean-Jacques: Drummondville; Lalande, Jacques: Montréal; Lamarche, Bernard: Montréal; Lambert,

Robert: Grand'Mère; Lévesque, Marc-André: Charny; Maher, Jean-Louis: Montréal; Michaud, Donat: Amqui; Monaghan, Martin: Québec; Moreau, André: Montréal; Ouellet, Jean-Paul: Montréal; Paquette, Jean-Guy: Montréal; Paradis, Léo: S.-Jean, Qué.; Pate-naude, Camille: Montréal; Pépin, Charles: Montréal; Raymond, Antoine: Verdun; Robert, Guy: Sherbrooke; Tessier, Paul Sylvain: S.-Casimir; Séguin, Conrad: Rigaud.



COLLATION D'UN DIPLOME "HONORIS CAUSA" AU DR WALSH

Photographie prise lors de la remise par l'Université de Montréal au Docteur A. L. Walsh, doyen de la Faculté de Chirurgie Dentaire de l'Université McGill d'un doctorat "Honoris Causa" en Chirurgie Dentaire.

De gauche à droite, nous voyons: le Dr Ernest Charron, doyen de la Faculté de Chirurgie Dentaire de l'Université de Montréal, M. Edouard Montpetit, secrétaire de l'Université de Montréal, Monseigneur Olivier Maurault, recteur de l'Université de Montréal, le Dr A. L. Walsh, le Dr Cyril James, principal de l'Université McGill.



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397 est Boul. S.-Joseph, Montréal

CONGRES DE L'ASSOCIATION DENTAIRE CANADIENNE

L'Association Dentaire Canadienne a tenu son premier congrès national, à Toronto, les 27, 28, 29 et 30 mai derniers. Cet événement marque une date importante dans les annales de la profession dentaire du Canada. C'est la première fois que notre association nationale organise une réunion de tous ses membres. Ces assises scientifiques donnent aux dentistes de ce pays, l'occasion de se rencontrer, de se connaître, d'échanger des idées et d'améliorer leur rendement professionnel.

Les dentistes de l'Ouest, ceux du centre et ceux de l'Est de notre immense pays poursuivent tous, des buts identiques qui se résument en somme à ceci: rendre service à la population et gagner leur vie. Leurs problèmes sont à peu près les mêmes; ils peuvent différer d'aspect par leur environnement local; ils sont soumis à des variations de forme, dues à une mentalité ou à une éducation provinciales; ils se présentent sous des angles particuliers selon qu'ils sont liés à des questions de langue et de conceptions diverses. Dans le fond, dans leur esprit, dans leurs grandes lignes, les problèmes du dentiste québécois ressemblent fort à ceux du dentiste de la Saskatchewan ou de la Nouvelle-Ecosse. La recherche des solutions à ces questions d'intérêt général doit être commune, c'est-à-dire, qu'elle doit être entreprise collectivement par tous les concernés. Les relations des plans provinciaux avec le domaine national ou fédéral, sont de plus en plus étroites. Les provinces voient leurs frontières, étanches d'autrefois, se confondre et disparaître. La tendance est à la centralisation. Cette coordination de tous les efforts, tendant vers une amélioration commune de l'existence professionnelle, au sein de notre groupement, est une bonne chose. Elle permet, par exemple,

d'offrir un front compact et uni aux revendications de l'Etat dans le domaine de la socialisation, des importations et du fisc.

L'état de guerre a mis entre les mains du gouvernement central des pouvoirs qui appartenaient aux régies provinciales. La fin des hostilités ne verra pas, ou peu, le retour de ces prérogatives à leur point de départ. C'est donc dire qu'à Ottawa devront dorénavant se faire la plupart de nos réclamations, en tant que corps professionnel autonome. Et seule, une association vraiment nationale, composée des dentistes de tout le pays, peut appuyer efficacement nos résolutions aux différents ministères fédéraux. Ce Congrès national de Toronto arrive à son heure. Les confrères Québécois étaient représentés dignement à cette réunion, par des conférenciers et par des congressistes.

Cette participation active du Québec à ce Congrès est un bon signe.

G. DE M.

REVUE DES REVUES

Anatomie de la Figure et de la Bouche Étudiée en Vue de la Prothèse" par

Elbert C. Pendleton, D.D.S., M.D.S., Chicago, Ill.: Journal of the American Dental Association, Février 1946.

L'objet de cette étude est de concevoir clairement et d'une façon complète l'anatomie de la face et des maxillaires en rapport avec la prothèse dentaire complète; elle est basée sur des dissections minutieuses des tissus, qui forment l'appareil buccal, tissus qui sont compris entre la peau et les os. Ces tissus sont étalés à des dentistes, pour des dentistes. Des coupes labiales, linguales et frontales de la figure et de la cavité buccale montrent les différentes couches de tissus, comme les dentistes les rencontrent dans la prise d'empreintes et l'insertion des dentiers. La musculature de la face joue un rôle dans la stabilité et la rétention des pièces par leur influence sur le développement extérieur de l'os et par leurs relations avec les surfaces labiobuccales du dentier. Les muscles de l'expression affectent l'adaptation du dentier par leur attachement à la muqueuse. La fonction des muscles de l'expression est compliquée; ils aident la

stabilité et la rétention de la pièce, quand on les emploie à bon escient; au contraire, ils deviennent des obstacles, quand on contrarie leur fonction. Il en est de même des muscles du palais mou et du plancher de la bouche, où des tissus "collagènes" peuvent réunir les muscles à l'os.

Ces tissus "collagènes" (tendons et aponeurose) ne peuvent servir à cause de leur manque d'élasticité, quand ils sont en contact avec la pièce de prothèse. Les tissus graisseux et glandulaires sont ceux qui conviennent le mieux au contact avec le dentier, parce qu'ils sont doués d'une grande élasticité. Les régions qui supportent le dentier sont bien pourvues de cellules élastiques, qui agissent comme tampons dans les chocs masticatoires.

Les dissections faites par les auteurs montrent les caractères, la location et la distribution des muscles de la bouche et des tissus mous sous-jacents et la conformation des bases osseuses.

La compréhension des relations de ces tissus avec les problèmes de la prothèse est d'une importance capitale pour le traitement de nos patients édentés.





By Courtesy of Papyrus

SPRING TIME

★

"You cannot convert the world — but the world is as good as it is because somebody has kept on trying."

—NEWTON G. THOMAS



V. D. CROWE, D.D.S.
Truro, Nova Scotia.

President of the Canadian Dental Association.
Past President, Nova Scotia Dental Association.
Elected Delegate to Canadian Dental Association 1942.



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MODERN DENTAL OFFICE ANAESTHESIA*

by P. C. LUND, M.D.

Dept. of Anaesthesia, Deer Lodge Veterans' Hospital, Manitoba

IN THIS paper I wish to discuss briefly the more common types of general anaesthesia being employed today for dental surgery in the office. It should be readily apparent that no single agent or technique is satisfactory in all cases, and that the best results will be obtained when the patients are individualized and the proper type of anaesthesia is used for each case. It is usually, but not always, possible to predict which agent or method will be the most satisfactory in a particular case, therefore a choice of agents should always be available, and the anaesthetist should be prepared to alter the method of anaesthesia during the operation to meet the physiological requirements of the patient. This decreases the danger to the patient as well as facilitating the work of the dental surgeon by producing better anaesthesia.

The advancement in general anaesthesia in dentistry during the past century has progressed along two channels: first, the introduction of new anaesthetic agents and techniques, and second, the training of both dental and physician anaesthetists who are capable of utilizing these various methods of anaesthesia to their greatest advantage. However, the numerous recent advances made by the medical anaesthetists will not be widely applied to dental anaesthesia until the laity as well as the dental profession as a whole are edu-

cated to the need and importance of specially trained dental and physician anaesthetists.

It is said that anaesthesia encourages rapid use of the dental engine with consequent generation of excessive heat and injury to the pulp; but no dental surgeon will knowingly use his burs at sufficient speed to injure the pulp unduly, just because the part is anaesthetized. Thus, "There are no dangers to the welfare of the tooth when anaesthesia is used in dental operations by the conservative dentist. In the hands of a ruthless operator, however, a warning should be sounded."

Contrary to common belief, the administration of comforting general anaesthesia in the dentist's office need not be fraught with more danger or risk to the patient than the introduction of a local anaesthetic or block if certain conditions prevail. The means of resuscitation must be immediately available as well as a ready plan of action. Generally speaking, this includes satisfactory suction apparatus as well as the necessary equipment for administering oxygen under pressure, and the common analeptics such as adrenalin, ephedrin, pitressin and coramine.

The presence of a laryngoscope as well as endotracheal tubes and the ability to intubate the larynx is the responsibility of the physician anaesthetist and need not concern us fur-

*Read before the Winnipeg Dental Society, Oct. 22, 1945.

ther. However, intubation of the larynx is within the realm of desirable knowledge of all dental surgeons, is easily learned, and may be a life-saver in the advent of a severe laryngospasm.

In addition to the items mentioned above (which may be purchased at only slight expense to the dentist) a couch or convertible chair is necessary on which the patient can recline if and when necessary.

The portable gas machine is usually supplied by the anaesthetist and is entirely unnecessary if intravenous anaesthesia is contemplated.

PREPARATION OF PATIENT

Too much emphasis cannot be laid upon the importance of proper preparation of the patient prior to the administration of general anaesthesia. It includes the abstinence from food and fluids for 3 or 4 hours at least. Pre-operative medication as morphine and/or atropine $\frac{1}{2}$ to 1 hour pre-operatively. These can be satisfactorily administered intravenously, decreasing unnecessary delay in the dentist's office. The new synthetic drug demerol will probably satisfactorily replace both of these drugs. Barbiturates such as nembutal, seconal or other common sedatives may also be used to advantage. The above drugs all tend to promote comfort and allay apprehensions on the part of the patient as well as decrease the amount of general anaesthetic agent necessary, and decrease the incidence of laryngospasm.

The selection of the anaesthetic agent or agents depends upon the patient's physical and psychic condition, as well as the nature of the operative procedure and the agents available. This is, however, usually left to the discretion of the anaesthetist and in any case is too lengthy a subject to be dealt with fully at this time.

INDICATIONS TO GENERAL ANAESTHESIA AND ANALGESIA

Now when is analgesia or general anaesthesia indicated in a dentist's office?

First it is indicated in nearly every painful operative procedure in which local anaesthesia is contra-indicated.

Second it is indicated in patients who have an excessive degree of apprehension or an unusually low tolerance to pain.

Third it is indicated in many cases of multiple extraction because the whole task may be completed including any necessary bridge preparation for dentures.¹

Local anaesthesia is contra-indicated in pathological conditions such as inflamed periodontal membranes or patients requiring extraction of teeth that have an inflamed pulp. It is contra-indicated in patients who are sensitive to local anaesthetic drugs and/or adrenalin. It is also relatively contra-indicated in the second group of patients above, i.e. those who have an excessive degree of apprehension or an unusually low tolerance to pain.

CONTRA-INDICATIONS TO GENERAL ANAESTHESIA AND ANALGESIA

It is contra-indicated in nearly all severe cardiac, respiratory, hepatic or renal diseases. In these cases, however, local anaesthesia may also be contra-indicated; thus as in diabetic patients, dental operations should only be undertaken after consultation with the attending physician and anaesthetist in regard to preoperative preparation, medication, choice of anaesthetic and post-operative care.

General anaesthesia may also be contra-indicated to a greater or lesser degree in the aged, weak and cachectic and patients with low B.M.R. as these also fall with the poorer risk groups.

Alcoholics and patients with high B.M.R. are difficult to anaesthetize by the usual method, but this really can't be considered a contra-indication to general anaesthesia and in any case they usually do well with intravenous anaesthesia.

Dr. M. F. Seeman² states that general anaesthesia when compared with local anaesthesia facilitates thorough

surgical work without interruption and minimizes post-operative pain and infection.

ANAESTHETIC AGENTS

I propose to deal with the anaesthetic agents seriatim; outlining details of technique in only those used most widely today.

*Chloroform*³ is mentioned only to be condemned, as it ranks first in toxicity among anaesthetic agents. It causes a sensitization of the automatic tissues of the heart and may even in low concentrations cause fibrillation and sudden death.

*Ethyl chloride*³ ranks second in toxicity to chloroform having a similar pharmacological action on the heart; thus these two agents have no place in modern dental office anaesthesia even though both are easy to administer and have a short recovery phase.

*Nitrous oxide*⁴ is the most widely used anaesthetic agent in dental office practice. Innumerable methods and techniques of administration are described in the current literature.

Dentists are probably more familiar with nitrous oxide as an analgesic agent such as produced with their standard Heidbrink machines rather than as an anaesthetic agent. In true nitrous oxide analgesia the patient is conscious although sufficient gas has been given to relieve or prevent pain. Concentrations of nitrous oxide as low as 10-20% with oxygen are sufficient to produce analgesia, are nearly entirely free from side effects or post-operative sequelae, and, recovery is extremely rapid. It is important to remember that 5-10 mins. are required to obtain the full analgesia effect of nitrous oxide therefore it is imperative not to begin the operative procedure too soon after induction.

Many dentists are using nitrous oxide analgesia in their daily practice. Satisfactory results are nearly always obtained by the experienced dental anaesthesiologist if attention is paid to details of technique. A very common mistake is to use too high a con-

centration of nitrous oxide with the result that the patient passes rapidly through the stage of analgesia into the stage of delirium and excitement. The Heidbrink or other gas machines which are controlled by voluntary efforts on the part of the patient have, however, surmounted this difficulty.

Analgesia with nitrous oxide is probably chiefly indicated in preparing painful cavities, particularly in unusually apprehensive patients and also in selected uncomplicated extraction cases.

NITROUS OXIDE ANAESTHESIA

Nitrous oxide is the least toxic of all inhalation agents, but unfortunately, also the least potent. Dr. McCarthy⁵ has aptly stated that the essentials of a successful technique with nitrous oxide in oral surgery are first, familiarity with the signs of anaesthesia and knowledge of the exact plane of anaesthesia at any time. Secondly, pressure insufflation of anaesthetic gases to exclude air from the open mouth, and thirdly, the immediate recognition and correction of even minor degrees of respiratory obstruction. There is no anaesthetic agent that requires more knowledge and attention to the signs of anaesthesia than does nitrous oxide oxygen anaesthesia and the danger of serious complications following anoxia cannot be emphasized too strongly. These complications are chiefly mental impairment, transitory or permanent, due to damage to the central nervous system. Pathologically these are capillary haemorrhage of cerebral vessels and oedema of the brain. It is commonly believed that as long as no cyanosis develops there is no anoxia; this is not at all true. Cyanosis merely represents a certain degree (about 10 per cent) of oxygen desaturation of the haemoglobin⁵. Thus if the haemoglobin is below 30 per cent, cyanosis is impossible no matter how much the oxygen may be reduced. On the other hand, a plethoric individual with a high percentage of haemoglobin will

show marked cyanosis with an insignificant oxygen deficit. The signs of physiological anoxia however, are briefly, irregular breathing, rapid pulse (over 100), and fall in blood pressure (below 100) with a corresponding decrease in pulse pressure.

Briefly, I wish to mention a few essential factors which apply to nearly all the modern nitrous oxide techniques.

In oral surgery the mouth naturally must be left open which normally will lead to dilution of the anaesthetic mixture with air. However, this dilution may be prevented in two ways; either by the introduction of suitable mouth pack or by insufflation of the anaesthetic mixture into the nasopharynx at a pressure greater than atmospheric which makes it impossible for air to enter the nasopharynx or mouth. Usually these two methods are employed simultaneously.

Asphyxia is much easier to prevent than to treat and careful attention to a number of relatively minor points in technique will be of the greatest assistance in the prevention of this complication.

Position of Patient: The chair with the seat at right angles to the back is tilted backwards and the head is held in line with the body. The chin must not be unduly depressed or allowed to drop down on the chest for this pushes the tongue backwards, causing obstruction to respiration.

The Mouth Prop: It is advisable to test patients with the mouth prop in place before beginning the anaesthetic, as some patients cannot breathe freely through the nose with their mouths open.

The Mouth Pack: Which serves to prevent inspiration of air, aspiration of blood, teeth, mucous or other foreign material and swallowing of blood, should not be introduced until anaesthesia is well established for it will cause annoying reflexes if the patient is too light. It must be of the correct size and should be introduced carefully so as not to push the tongue

backwards or itself cause respiratory obstruction.

Nasopharyngeal Airways: These are short rubber tubes introduced through the nose, reaching into the lower part of the pharynx, almost to the epiglottis. These produce a satisfactory free airway and are almost essential in patients who cannot or will not breathe through the nose.

Endotracheal Anaesthesia: (Nasotracheal or oro-tracheal). This form of anaesthesia can always be resorted to in the difficult patient or for the prolonged major procedures with much haemorrhage and danger of respiratory obstruction. It is usually considered a hospital procedure but there is no reason why it cannot be satisfactorily accomplished in the dental office. This technique has the following principle advantages:—

First: Complete freedom of air way and control of intra-pulmonic pressure.

Second: Prevention of aspiration of foreign material into the larynx and exclusion of air from the anaesthetic mixture.

Third: The anaesthetist as well as the anaesthetic equipment need in no way hinder or interfere with the work of the dental surgeon.

Ether: It is but rarely used in office practice today due to prolonged induction and recovery phases as well as numerous undesirable post-operative effects notable among which are nausea, vomiting and general malaise.

Ethylene: This agent is very similar to nitrous oxide but more explosive and also very difficult to obtain here so we need not deal with it further.

*Cyclopropane*⁶: Some authors consider this agent suitable for office anaesthesia but I consider it too dangerous, except under special circumstances, chiefly because of its explosive hazards.

Vinethene: or Divinyl ether. This is a relatively new, potent, inhalation agent usually administered by the open drop technique. It is ideal for

short operative dental procedures requiring general anaesthesia and children tolerate it extremely well. Induction is rapid and not unpleasant to the patient and relaxation is adequate. Recovery likewise is rapid, and, when properly administered, nausea and vomiting are very rare; however, the patient should be kept under observation 10-15 minutes after apparently completely orientated.

In children it certainly is the agent of choice in short operative procedures and unlike ethyl chloride it does not have a toxic effect upon the heart.

Pentothal Sodium: An intravenous almost completely non-toxic anaesthetic agent which many authors consider the least dangerous of all anaesthetics, in expert hands. It has been used widely in office as well as general hospital practice. For example, Dr. B. A. Olsen⁷ of Hollywood, Calif., has employed pentothal sodium in over 8,200 cases of oral surgery in his office practice. It is preferred to nitrous oxide because of ease of administration, absence of excitement stage as well as post-operative nausea and vomiting. It is an anaesthetic agent, which, generally speaking, when expertly administered is free from side effects and is tolerated by nearly everyone. However, for the safety of the patient, hospital facilities or their equivalent must be present and a trained anaesthetist is essential.

Induction of anaesthesia with pentothal sodium is very rapid and pleasant without an excitement stage. Recovery likewise is rapid without nausea or vomiting. Post-operatively the patient is comfortable, restful, non-apprehensive and occasionally even euphoric.

Most authors agree that it is best administered in a very dilute solution—2½% or less—and that the intermittent technique as recommended by Lundy at Mayo Clinic be employed. This dilute solution prevents the production of a slough even when accidentally injected extravenously and produces smoother anaesthesia as well

as decreasing the chance of giving an overdose.

Generally speaking that which was said about position of patient and maintenance of airway, etc., when dealing with nitrous-oxide, applies also to pentothal sodium anaesthesia. There are, however, certain precautions which must be taken when using this agent because it often causes a hyperactive laryngeal reflex and there is always the possibility of a laryngospasm. Thus it should not be administered unless a laryngoscope and an endotracheal tube are at hand as well as an anaesthetist who is adept in their use. Adequate means should always be available for the administration of oxygen under pressure as well as suitable suction apparatus. Greater care should be taken in the insertion of the pharyngeal pack and in the prevention of blood, mucous and other foreign material from reaching the larynx or epiglottis. Atropine or demerol should always be given pre-operatively to decrease the possibility of this laryngeal irritation and a short acting barbiturate as nembutal or seconal may also be helpful. The specific antidotes coramine or picrotoxin should always be at hand to nullify the accidental administration of an overdose.

I feel certain that nearly all mishaps with pentothal sodium in the past have been due to either lack of care in administration or inexperience; probably the simplicity of administration, the pleasant and quiet manner in which the patient loses consciousness have misled many surgeons and anaesthetists into the belief that intravenous anaesthesia does not require special skilled attention during its administration.

As is true of nitrous oxide, it may be used in very small doses as an analgesic agent with the patient conscious and sitting upright in the dental chair. After having received a few cc's. the patient opens his mouth when told to do so and the anaesthetist inserts his mouth prop. The patient may moan or make a grimace when

a tooth is extracted but he has no recollection of it post-operatively. His laryngeal and pharyngeal reflexes are active and when asked to spit up whatever blood is present, he is able to do so. Complete recovery in these cases requires usually but a few minutes. This technique, I believe to be ideal for extractions and the preparation of painful cavities in most instances.

The advancements and improvements in dental office anaesthesia have not been accidental but have followed the increasing demands for this type of anaesthesia; and contrary to common belief, a great number of patients still ask for general anaesthesia or analgesia. Not only children but also many adults are terrified of the long local anaesthesia needle and the "atomic powered drill."

For many years the only anaesthesia factor which concerned dentists was

that of the safety of their patients. Today, however, the dental or physician anaesthetist is concerned not only with this safety factor, but also with two other very important factors, namely—first, comfort; and second, rapid convalescence of the patient. I contend that modern dental office anaesthesia as outlined above, satisfactorily combines these factors—safety, comfort and rapid convalescence of the dental patient

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The best managed and the most progressive dental society we have ever seen is now operating in California. It is the Southern California State Dental Association. It is true that they change officers each year but they have a way of making way for youth to carry the burden. Best of all, they have a suite of beautiful offices manned by the most efficient, fulltime personnel you can imagine. When a man is elected to office out there, he knows that he has a strong administrative group behind him that really understands how a dental society should be run. Other dental societies in this country might well take something from their book. How do they do it? Well, in the first place, the members pay dues of seventy dollars per year. A man who won't put that much back into dentistry isn't going to make much of a member. Maybe they found that out. Anyway, they have a large membership so we guess that they didn't lose anyone when the dues went up. The members know that they are getting value received.

—James Robinson in *Tic*—

A prominent salesman, now retired, summed up his success in three little words: "And then some."

"I discovered at an early age," he said, "that most of the difference between average people and top people could be explained in three words. The top people did what was expected of them—and then some."

"They were thoughtful of others; they were considerate and kind—and then some! They met their obligations and responsibilities fairly and squarely—and then some! They were good friends to their friends—and then some! They could be counted on in an emergency—and then some!"

—Bul. of the Ont. D. Nurses' and Assistants' Assoc.

THE GROUP MOVEMENT IN GREAT BRITAIN

by A. E. ROWLETT, Leicester, England

IT HAS occurred to me that some explanation of the formation of Groups in British dentistry might be useful, as there is a possibility that these organizations may play an active part in the comprehensive dental health service later on.

You will be aware that, owing to the imperfect draft of the Dentists' Act 1878, neither protection of practice nor of title was given to the L.D.S. As a result, a large body of unregistered practitioners emerged, a proportion of them being advertising quacks of a very undesirable kind. There were, however, many men who would have liked to qualify as dental surgeons if it had been possible and they made gallant attempts to improve themselves by means of lectures and demonstrations given by qualified dentists and endeavoured to restrain the excesses of advertisers. These men first formed themselves into a society of extractors and adaptors. Later on, they became the Incorporated Dental Society (I.D.S.) which had rules and regulations and imposed a standard of ethics upon its members; the organ of this society, which still exists, being the Mouth Mirror. There never has been any class in Great Britain corresponding to the "Dentisten" of Germany or the "Zahntechniker" of Austria, who were incorporated bodies and I believe are only permitted to take impressions and make artificial dentures. If the technicians get what they want and what is recommended by Major General Helliwell in the new Health Insurance Act, they will correspond to those German and Austrian technicians.

In 1921, the Dentists' Register was opened and a large number of these unregistered men taken in and they are generally referred to as "1921"

men. This Dentists' Act of 1921 gave complete protection of title and practice to a much greater degree than the medical profession possesses. A proposition was brought forward immediately after the passing of the Act to make these 1921 men eligible for membership of the B.D.A. but it was defeated after a severe struggle and in spite of repeated efforts, the last one in 1944, the British Dental Association and the Incorporated Dental Society are still separate entities.

The growth of the Public Dental Service, school and military, and the introduction of panel dentistry produced a third society, namely, the Public Dental Service Association (P.D.S.A.) and its organ is the Dental Gazette. There are thus three societies:—

The British Dental Association, which is a society entirely of qualified registered dentists. *N.B.* A medical man whose name appears on the medical register is allowed to practise dentistry, but even if he has a dental diploma or degree in addition to his medical qualification, unless his name is on the Dentists' Register, he is not eligible for membership of the British Dental Association.

The Public Dental Service Association, which contains a mixture of 1921 dentists and qualified men.

The Incorporated Dental Society, which is chiefly made up of 1921 men but there are a sprinkling of qualified dentists. There are, in addition, a small proportion of dentists who belong to no organized society.

CO-OPERATION BETWEEN THE THREE SOCIETIES

Although there was no amalgamation of the three societies, it became necessary to form a Dental Benefit Council, which provided co-operation in negotiations with the Minister of Health and the approved societies

(these are insurance societies, like the Prudential) who granted benefit. Representatives of the three dental societies, the insurance societies and the Ministry of Health made up the Council. At the same time, smaller local councils containing members of the three dental societies were formed voluntarily; these councils met and held friendly discussions as occasion demanded, generally in order to discuss scale of fees and administration in panel work.

With this new insurance act, it became necessary to form an ad hoc committee of the three societies, that is a Consultative Committee, representing the whole profession, which could meet Mr. Aneurin Bevan, our Minister of Health, and put forward the case of the dental profession in the hope of guarding its interests. The conflicting interests of the 1921 men and of the licenciates made harmonious co-operation between these representatives of the B.D.A., P.D.S.A. and I.D.S. a matter of extreme difficulty, the reason for which is perfectly clear when one remembers that the 1921 men are a wasting asset, like a coal mine, and can only be interested in a short term policy, while the qualified dentists are increasing in numbers year by year and are taking a wider view, embracing the future of the young qualified dentists. In 1924, the total number of dental surgeons on the register was 6079 and of 1921 men 7301. At the present time, the respective totals are 9865 dental surgeons and 5327 1921 men. No doubt the new health service problem provides plenty of headaches for Canada and the United States of America but you have only one organization to deal with and not three organizations with three heads and speaking with two or three discordant voices.

GROUPS

For many reasons, which you will easily supply for yourself, when it is borne in mind that the B.D.A. must

start as a senior partner and ultimately become the sole society, there is a very poor chance of unity of the three societies in the near future. The problem, however, which was impracticable at the centre, is being solved with surprising smoothness at the periphery, and is spreading rapidly all over Great Britain. This is what is known as the formation of Groups; the first Group was started at Yeovil in Somerset in 1942, and this spread over the south of England to London, and it has now reached the Midlands and the North. The Groups are autonomous, the amount of activities being largely dependent upon the enthusiasm and energy of the local group secretaries. Much against my will, I was made Chairman of the Committee of the South Leicester Group, a position I only took on the understanding that the Vice-Chairman was a 1921 man, and he happens to be the President-elect of the I.D.S. In some Groups, all the officers, Chairman, Secretary and Treasurer are 1921 men, the licenciates being just plain committee men. I shall slide out of the chair at the earliest opportunity and only took it because one or two of the B.D.A. men were unable to attend the inaugural meeting of the Group and I had to hold the fort. If you have managed to gather the type of administration and its set up from the above, you will understand the possible function of a body of dentists who can speak for every member of the profession in the city or county concerned, when nominations are made to the various health committees and councils and in addition its value in dental health negotiations with local authoritative bodies. There is a good deal of wishful thinking going on in these Groups, especially with regard to the ancillary services, but perhaps it is better to say too little rather than too much.

Just before the war, all over Great Britain joint meetings were called and a number of war emergency councils were formed, covering three or four counties. Our particular council

was called the District Dental War Committee and included Leicester-shire, Rutland and Northampton. These councils were merely advisory; they deliberated upon the calling up of dentists for the forces and also of mechanics, either as dental mechanics for the forces or for the munition works, the allocation of the remaining mechanics and dental nurses among the civilian dentists and acted generally as a committee of reference for all dental questions in the area. Perhaps it should be explained that a large number of dentists employ trained technicians or mechanics in their own laboratory workshops attached to the practice, although in large towns, technical laboratories working for the profession are greatly on the increase. Although these councils had no power of action, their recommendation has carried very great weight with the appropriate authorities making final decisions. Their secretary also acted as convener when joint meetings were desirable to establish other activities, e.g. the War Practice Protection Scheme and, later on, the Groups. It will be clear that already a very considerable amount of co-operative effort between local dentists had been in existence during the war years and despite the fact that the 1921 men were not eligible either for school dental service or service in the armed dental forces and have enjoyed a wonderful time of prosperity during the war years, our demobilized dental officers have shown very little jealousy or bitter feeling with regard to these 1921 men and are quite ready to work harmoniously with them.

STRIKES

The newspaper report of the strike of 500 dentists is completely misleading. What happened is this—in the panel service there is a free choice of dentists and a free choice of patients. The technicians' fees were so high for making artificial teeth that sometimes they overtopped the entire remuneration that the dental practitioner re-

ceived under the panel scheme for impressions and fitting of dentures. Accordingly, some of these men refused dental letter, that is, they refused to do prosthetic work for panel patients. The error crept in when they refused it as a group instead of individually, and some of the group dentists possibly opened their mouths a bit too wide instead of referring the matter to headquarters. This, of course, was *NEWS* and journalists are very much the same the world over.

Below is appended the resolution for the formation of Groups in Leicester which I think will give a fair idea of the spirit which is animating these groups in their inception.

ORIGIN AS PRESENTED TO THE SOUTH LEICESTER GROUP

A *GROUP* is a free and autonomous association of registered dentists brought into being by the singular position in which British dentistry finds itself today, both from its history and from the form of government. Its intention is to provide a coalition at the periphery which, after repeated efforts, has not proved practicable at the centre.

Its ideals and activities envisage neither incorporation nor formation of a fourth association. It has no headquarters, no annual subscription (expenses are covered by a voluntary donation, usually 10/- per head) and may be described as a Committee of citizen dentists; it discourages publicity and any resolutions which may be passed are destined to be sent to the three associations for information and action, to the end that these three associations may be able to speak with the assurance that they are voicing the agreed opinion of the whole of the dental profession.

ORGANIZATION

A *GROUP* covers the area of one or more Parliamentary Divisions, so as to be able to get into personal contact with the Members of Parliament.

Everyone on the Dentists' Register is eligible for membership.

MEMBERSHIP

Group activities are co-ordinated by a Regional Committee—Regional activities by National Conventions.

OBJECTS

1. To secure the active membership of every available practitioner.
2. To set up a standard of ethics.
3. To adopt strictly a minimum scale of fees.

4. To regularize surgery hours.
5. To give mutual help in case of illness, shortage of technicians, etc.
6. To encourage its members to join one of the dental societies or associations.
7. To be vigilant in safeguarding the Practice of Dentistry in the public interest as an integral part of the Health Service.

You may take it from me that strikes are definitely *NOT* in the Group policy.

ANNOUNCEMENTS

Convention of New Brunswick Dental Association

The 51st Annual Convention of the New Brunswick Dental Society will be held at the Admiral Beatty Hotel, Saint John, N.B., September 16 and 17—Dr. S. K. Wetmore, Sec., 147 Germain St., Saint John, N.B.

Montreal Dental Club

The 22nd annual Fall Clinic of the Montreal Dental Club which will be held in the Mount Royal Hotel on October 23-25 will again feature a progressive clinic, limited attendance clinics, essays and table clinics by leading members of the profession.

The progressive clinic will be on Oral Surgery and conducted by Dr. S. P. Mallett, director of the Department of Oral Surgery at the Boston City Hospital, and will consist of three two hour sessions. Attendance at this clinic will be limited to 75.

Early hotel reservations are advised. In making them do not emphasize attendance at the Fall Clinic.

Further details of program will appear in subsequent issues of the Journal.

M. L. DONIGAN, *Director*,
1414 Drummond St.

A. D. A. House of Delegates to Meet in Miami, Fla.

The 1946 annual meeting of the House of Delegates of the American Dental Association will be held in Miami, Fla., on Oct. 14, 15, and 16.

It has been decided that the holding of a full scientific meeting was impossible during 1946 because no city could satisfactorily provide the necessary facilities.

Chicago Dental Society

The 1947 Midwinter Meeting of the Chicago Dental Society will be held at the Stevens Hotel, February 10-13. Officers and committeemen of the Society are planning a full scale meeting similar to those held prior to the war.

Strive to excel, strive to achieve, and you will find no space in your mind for resentment.

—George M. Adams,

The Forum

ORAL CONDITIONS IN EXPERIMENTAL VITAMIN C AND B DEFICIENCY

by Dan Y. Burrill, D.D.S., Louisville, Ky.

Summary of Paper in Jour. A.D.A., May 1, 1946

In a study of the oral conditions of five subjects deficient in vitamin C, four deficient in vitamins C and B and two control subjects, the deficiency was produced by a controlled diet and lasted for seven months. The subjects were seen periodically for examination, coloured photographs and capillary fragility tests. Oral roentgenograms were made at the beginning and at the end of the experiment. The capillaries of the gums were studied by means of a capillary microscope at the end of the deficiency period.

No oral changes of any kind attributable to the vitamin deficiencies were found. There was no increased tendency to inflammation, swelling or

bleeding of the gums. There was no loosening of the teeth. The deficiency did not interfere with bone healing in apical rarefaction. There was no increase in depth of periodontal pockets and no apparent disturbance of the lamina dura. There was no apparent change in the configuration of the gum capillaries or in their strength.

It is concluded that even severe vitamin C and B deficiencies do not produce symptoms in clean mouths of young adults, at least within a period of seven months; and that, at least for the period of time covered by this study, dietary adequacy is less important for oral health than is oral cleanliness.

PROBLEM AS SEEN BY A MEMBER OF THE PROFESSION

by LOREN T. HUNT, D.D.S., Member A.D.A. Council on Dental Health

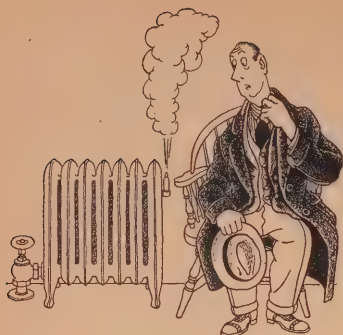
The overall picture of dentistry in the postwar era is favourable. A vast sum of money equitably distributed, the wartime savings of our citizens, will provide increased health service which a larger percentage of our people than ever before regard as of first importance.

The cumulative load of dental service in industrial dentistry is overwhelming.

At no time have more potential patients been in a receptive mood to listen to any story pertaining to their physical well being. It is our public

relations job to tell this story convincingly.

In the last analysis the best safeguard for the individual is to be considerate of those who seek your service in good times. Even when difficult, try to keep up with your patient call list for periodic service. This may not appeal to some, but for the general practitioner it is one of the best ways to sustain a dental practice in a valley of depression. What you do today will have much to do with your practice of tomorrow.



A TEST FOR YOUR

PROBING one's faults is painful business. It takes courage. But it pays dividends.

So set your jaw and take a try at answering the questions in the next column. There are eleven questions in all. Top score is indicated in parentheses after each; you're entitled to this if you can answer the question with an unqualified "yes". If you cannot, score yourself proportionately.

A total of 100 is perfect, entitling you to a cherry tree memorial; 80 is good; 70 passing; and anything below that a sign of need for early correction.

If your assistant hasn't already filled in the scores on this test before you get it, let her have a try at it also.



RECEPTION ROOM

1. Are there enough hooks for patients' hats and coats? (8)

2. Are reading lamps adequate in number and intensity? (9)

3. Is the temperature right? (10)

4. Have you sufficient seating capacity? (13)

5. Are your magazines ample and up to date? (6)

6. Is the room pleasantly decorated? (10)

7. Are patients unable to hear nurse's phone conversations with other patients? (6)

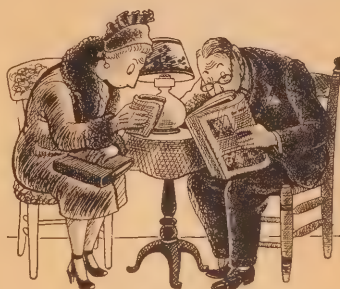
8. Are diplomas taboo on the reception room walls? (3)

9. Is the room immaculate? (18)

10. Is it free from odours? (10)

11. Do you spare patients the sound of loud bells and buzzers? (7)

TOTAL



ONE HUNDRED YEARS AGO

THE following extracts from Letters of George IV, Vol. III, will be of interest to members of the dental profession.

ITEMS FROM GEORGE IV ACCOUNTS (p. 500).

Samuel Cartwright's (Dentist) Bill for attendance upon the King from 1 Jan. 1829 to 17 Dec. 1829.

29 visits to Windsor by arrangement, 20 guineas per visit £609

8 visits to St. James's and with detention more than 14 hours at the Palace,

3 guineas per hour £ 42

Mechanical £ 50

£701

From 21 Jan. to 3 June 1830

5 visits £105

£806

(The Bill was paid by Wellington and Knighton on 14 July 1830)

THE EARL LAUDERDALE TO SIR WILLIAM KNIGHTON (p. 56 letter 1136)

Dunbar House

19th January 1824.

I have not intruded upon you for a length of time because I have uniformly received from various quarters such good accounts of His Majesty's health as to be quite at ease upon that subject. But I am now going to write to

you to communicate to you a little invention of my own which it would give me great pleasure to think produced as much ease and comfort to his Majesty as it has done in my case.

You perfectly well know the lint which is prepared in all hospitals and, indeed, in all apothecaries' shops. I have found that by cutting a bit of it exactly the shape of the gold in the inside which fits the gums, and after steeping it in a little tincture of myrrh, placing it upon the gold before the teeth are put into the mouth, that it takes off all the irritation arising from the metal being in contact with the gum, whilst at the same time it fixes the teeth much firmer and more comfortably than they can be fixed without it.

My practice is to do this every morning, and every day after dinner, and my servant can cut the thing accurately to the shape when once he has the pattern. That you may see how easily it is managed I send you a duplicate of the pattern I use. If it is applied to the lint doubled of course you know when it is afterwards opened it makes the complete round. You will observe from the shape that it does not go all the way back, but that from experience I feel to be the preferable mode.—British D. Jour.

MANDIBULAR OSTEOMYELITIS: ITS DIAGNOSIS AND TREATMENT

by WILLIAM E. DURBECK, D.D.S., San Antonio, Texas.

Conclusions of paper in Jour. of O. Surgery, Jan. 1946

1. Prompt recognition and treatment of osteomyelitis are imperative.
2. The roentgen picture of osteomyelitis may be differentiated from that of malignant destruction.
3. Penicillin given early and intensively is the agent of choice for systematic therapy.
4. Sulphanilamide may be indicated locally. The recent summaries of accumulated war experience, in general, discount the introduction of any chemical agent into a wound, for its supposed antiseptic effect. This concept is more particularly applicable in the management of war wounds for which the local use of chemo-therapeutic agents has been abandoned.
5. Surgical measures are indicated when significant sequestration is observed in the roentgen series.
6. An external approach is preferable to prevent contamination from the oral fluids.



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CANADIAN DENTISTRY GROWS UP

In May I had the privilege of attending the National Convention of Canadian Dentists in Toronto under the auspices of the Canadian Dental Association and the Ontario Dental Association. There was a registration of over one thousand and as one observed the superb functioning of this all-Canadian program, one could not help but feel that Canadian Dentistry had grown up. I simply revelled in Dentistry. I felt the heartbeat of our profession. I sensed the lofty ideals, the virile character of the entity called Canadian Dentistry. Dentists from sea to sea gathered in Toronto, all nine provinces being represented which in itself is an achievement. I felt that our profession had found itself and as I witnessed the sanity, the wisdom, the enthusiasm, the vitality, the hard work and the true statesmanship, I felt that a new force had grown up in our profession, the united strength and wisdom of Canadian Dentistry.

As always in matters of this kind success depends on leadership and one cannot praise too highly the efficient leadership of Dr. Harvey Reid, President of the C.D.A. and Dr. Frank Martin, President of the O.D.A. and their cohort of able supporters. One of the prime attributes of clever leadership is in the selection of men to do much of the actual work and in this our leaders excelled themselves in choosing Dr. P. G. Anderson as General Chairman of the Joint Convention Committee, Dr. Don Gullett as Secretary, and Dr. Glenn Mitton as Treasurer. These men, together with the galaxy of competent chairmen of committees: namely, Grant, Marshall, White, Fisk, Bothwell, Paul, Dawson, Grose, Prendergast, Lowery and Mit-

ton, are entitled to our sincere thanks and much more, for their sacrifice and efficient labour in the interests of our profession. The ladies were particularly well looked after by the Ladies Committee and under the capable direction of Mrs. Reid and Mrs. Martin, no stone was left unturned to see that not only a splendid program was provided but that every visiting lady was looked after from the time she set foot in Toronto until the train announcer called "All Aboard". A very happy event at one of the luncheons was a presentation to Dr. Edgar W. Paul upon his retirement from the College. The presentation was in the form of a portrait of himself done in oils by Archibald Barnes, being a tribute from former students and friends.

One would be indeed remiss if special mention was not made of the high standard of entertainment provided wherever entertainment entered into the picture. For a man to stoop to degrading levels in his personal life is one thing but to stoop to these low levels when organized dentistry holds forth is quite another thing and it was indeed pleasing to observe the very high standards set by the men who had these affairs in hand. Dr. Marshall's arrangements for the Memorial Service called for special commendation. Dr. Bothwell's plans for the Hart House Reception were unexcelled. Dr. Lowery's closing Fellowship Luncheon brought to a close a convention of outstanding character.

This whole gathering impressed me with the fact that a great job had been done for our profession and done most efficiently and also as to what might be accomplished had we the imagination, the determination, to turn the necessity for increased dues to the C.D.A. into a great crusade until our objective has been reached. With our present resources we cannot afford to undertake much that should be undertaken. As I pictured the vast fields of opportunity lying ahead of us, I wondered if we were not ready to write the last words of a chapter of dental achievement and begin writing the first words of a new chapter of all out dental progress regardless of cost. President Reid's splendid address to the Association pictured a new era when each one of us would set our shoulder to the wheel and do what was necessary to accomplish our ends. This is no idealistic conception of our need, it is most practical and urgent.

George Washington said "Let us raise a standard to which the wise and honest can repair; the rest is in the hands of God". Dentistry should raise its standards high. We have scarcely made more than a dent in the matter of prevention of dental caries, one of man's great curses. We have won the war but we are plagued with more want, and fear, than ever before. Let me urge upon us, as dentists, the control of our greed, and of our fears and develop to the limit of our capacity, an understanding of our fellows, the human race in general, not for a month or a year, but for all time. Such a standard involves study, sacrifice and soul searching if we are to develop a healthier, wiser and happier man of tomorrow.

Now is the time to embark on such a course. According to reports \$5,000,000 was set aside during the war to discover a substitute for quinine

and as a result several drugs have been discovered which are superior to quinine for the treatment of malaria. According to other reports, the atomic bomb cost \$3,500,000,000. Results were demanded, were paid for and were obtained. Let us not forget that we can buy any result we wish but we must pay a commensurate price. We can only expect mediocre results with niggardly outlay, and surely thirty-three cents a month is a miserly contribution to so great a cause as ours. If we are to be a profession of outstanding originality and imagination, we must place opportunity above security in our list of priorities.

The next meeting of the Canadian Dental Association will be held at Digby, Nova Scotia, next June, under the leadership of our new President, Dr. Victor Crowe of Truro, Nova Scotia. It is most unfortunate that the biennial convention of the Western Canada Dental Society is being held at Banff, Alberta, about the same time. This will interfere with both meetings undoubtedly, but those responsible for the arrangements felt that no other plans could be worked out.

M.H.G.

BOOK REVIEW

The Science of Dental Materials, by Eugene W. Skinner, Ph.D., Professor of Physics, Northwestern University Dental School. Third Edition, revised. 410 pages. Illustrated. Published by the W. B. Saunders Co., Philadelphia and London. Canadian Agents, McAinsh & Co. Ltd., Toronto. Price \$5.50.

This work offers a basic study of the materials and accessories used directly for restorative dentistry and orthodontics. Anaesthetics and medicaments are not within the scope of the book and are not included. It is assumed that the reader has a working knowledge of physics and chemistry. With this background the book gives the dentist information which will enable him to approach the choice and use of materials in a scientific manner. The materials discussed include gold and its alloys, dental amalgams, zinc phosphate, copper and silicate cements, gypsum products, denture base materials, waxes, gutta-percha impression plastics, dental porcelain and abrasives. In addition to the

physical and chemical properties of the materials the author describes their manipulation and to some extent the clinical application of the information arrived at. For example in discussing impression materials the author advises, "In order to obtain an impression with the least amount of distortion or breakage, it is imperative that the hydrocolloid materials be removed from the teeth suddenly with what almost amounts to an impact force or jerk—If the impression is withdrawn slowly a fracture of the material may occur as it slides over the undercuts and dovetails".

Since the earlier editions considerable progress has been made in the use of acrylic resins and the chapters on this have been rewritten. The American Dental Association Specifications in the Appendix have been brought up to date. The author is to be congratulated on his effort to enable the reader to discriminate between fact and propaganda in his consideration of claims regarding dental materials.

KENNETH M. JOHNSON

Modern methods of treating cancer have yielded more satisfactory results than is generally realized. Recent statistics of 36,000 "cured" cases of cancer in which treatment consisted of surgical removal, irradiation or a combination of both, have been collected by the American College of Surgeons. These patients have been free of all evidence of cancer for at least five years following treatment.

—From Proceedings of Staff Meetings of Mayo Clinic—

DENTAL CORPS NEWS

SUPPLEMENTARY LIST OF CANADIAN DENTAL CORPS OFFICERS

RETIREMENTS

Rank, Name and Date	Civilian Address	Rank, Name and Date	Civilian Address
Capt. G. E. Mallam, 3-5-46	Heart's Content, Nfld.	Capt. J. W. Corbett, 8-5-46	Hamilton, Ont.
Capt. R. T. Parker, 4-5-46	Summerside, P.E.I.	Capt. M. Cornish, 24-4-46	Toronto, Ont.
Capt. N. B. Anderson, 4-5-46	Lunenburg, N.S.	Capt. D. C. Geddes, 30-4-46	Clinton, Ont.
Lt.-Col. W. G. Dawson, 25-4-46	Halifax, N.S.	Capt. M. M. Goldberg, 16-4-46	Toronto, Ont.
Capt. C. M. R. Jackson, 2-5-46	Halifax, N.S.	Capt. J. A. Gorchynski, 25-4-46	Toronto, Ont.
Capt. C. Sklar, 25-4-46	Kentville, N.S.	Capt. J. H. G. Harwood, 28-3-46	Toronto, Ont.
Capt. A. L. Lunau, 24-4-46	Moncton, N.B.	Lt.-Col. G. D. Leggett, 25-4-46	Toronto, Ont.
Capt. G. E. Amiot, 8-5-46	Lacolle, Que.	Capt. H. Levita, 2-5-46	Toronto, Ont.
Capt. G. Beaulieu, 26-4-46	Montreal, Que.	Capt. P. R. MacFarlane, 24-4-46	Toronto, Ont.
Capt. C. H. Dundass, 17-4-46	Montreal, Que.	Lieut. K. R. Nicholson, 2-5-46	Toronto, Ont.
Capt. J. G. Dupuis, 6-5-46	Montreal, Que.	Capt. W. O. Nursey, 20-4-46	Hamilton, Ont.
Capt. P. Guevremont, 3-5-46	Montreal, Que.	Capt. J. A. Parish, 25-4-46	Toronto, Ont.
Capt. A. Jacob, 10-5-46	Montreal, Que.	Major C. M. Rhodes, 12-4-46	Seeley's Bay, Ont.
Capt. P. A. Ostopovitch, 9-4-46	Montreal, Que.	Major H. A. Semple, 9-4-46	Toronto, Ont.
Capt. J. G. B. Pariseau, 23-4-46	Brownsville, Que.	Capt. A. Skudwick, 12-4-46	Hamilton, Ont.
Capt. G. M. Pinault, 6-5-46	Montreal, Que.	Capt. S. Spivak, 2-5-46	Toronto, Ont.
Capt. J. J. Rinfret, 8-5-46	Louisville, Que.	Lt.-Col. E. A. Stewart, 8-4-46	Toronto, Ont.
Capt. J. Saindon, 8-5-46	Outremont, Que.	Lt.-Col. W. M. Twible, 7-5-46	Toronto, Ont.
Capt. S. Silver, 2-5-46	Montreal, Que.	Lt.-Col. J. Witchel, 9-5-46	Barrie, Ont.
Capt. H. Tremblay, 8-5-46	Rimouski, Que.	Lt.-Col. W. Grenkow, 5-4-46	Winnipeg, Man.
Capt. W. J. Akins, 9-4-46	Maple Hill (Manotick) Ont.	Lt.-Col. R. Luke, 18-4-46	Winnipeg, Man.
Lt.-Col. W. F. Armstrong, 26-4-46	Toronto, Ont.	Lt.-Col. A. Malkin, 26-4-46	Winnipeg, Man.
Capt. S. Chernin, 2-5-46	Toronto, Ont.	Lt.-Col. C. V. Sibbald, 19-4-46	Winnipeg, Man.

CANADIAN DENTAL ASSOCIATION NEWS

Our National Convention of Canadian Dentists

Prior to the meeting, the Board of Governors of the Canadian Dental Association had been in session for nearly four days. Toward the end of these deliberations dentists, many of them with their wives, began to arrive from the East, and the West and the North and the South. Toronto was prepared to be host and great numbers of dental visitors came to make history—the largest dental meeting ever held in Canada. It was a great meeting—well over 1000 dentists registered to contribute their support in program and good fellowship. It was the response of the dental profession all across Canada to a well conceived, well publicized and well organized convention under the able direction of Dr. Harvey W. Reid, President of the Canadian Dental Association, Dr. Frank Martin, President of the Ontario Dental Association and Dr. P. G. Anderson, Chairman of the Joint Convention Committee.

For seventy-nine years the Ontario Dental Association has held an annual convention. In Winnipeg, one year ago, Dr. Frank Martin invited the Canadian Dental Association to meet with the Ontario Association in Toronto in 1946. Thus the seed was sown and from this, the idea of a National Convention of Canadian Dentists under the joint auspices of the

Canadian Dental and the Ontario Dental Associations evolved. A convention committee gradually took form around the respective presidents and secretaries of each association. Sub committees were appointed and the chairmen became members of the Central Committee. This Committee met weekly under the direction of Dr. P. G. Anderson to review progress and co-relate plans. Eventually the master plan matured, the curtain call came and the show was on. It is now a memory and a pleasant one to all who attended. The meeting had professional dignity and provided an outstanding scientific program, an opportunity for fraternization and social functions in keeping with the most artistic tastes.

The meeting got under way with a grand opening luncheon attended by over 700 persons. Chairman Dr. Anderson was accompanied at the head table by Dr. Harvey W. Reid and Dr. Frank Martin, together with the members of their respective Boards of Governors. Mayor Robert Saunders attended to welcome his fellow Canadians to Toronto and to wish them a pleasant visit. Dr. H. J. Cody, Chancellor of the University of Toronto graciously came to give the Convention invocation and so proceedings were under way,



Representatives from each Province attending the Fellowship Luncheon
National Convention of Canadian Dentists, The Royal York Hotel, Toronto

But there was a pause. Chairman Anderson asked the great assembly to stand in silent tribute to those colleagues whom death had called in the last year. Then he asked everyone to face the flag bedecked stage as Dr. Don Gullett read the names of those members of the Dental Corps who had made the supreme sacrifice during the Great War in the service of His Majesty. All was quiet as the lights were lowered and the Union Jack fluttered in the spotlight. A familiar voice came over the loud speaker to break the silence. It was that of Dr. Harry Garvin, Chairman of the War Memorial Committee.

*"They shall grow not old, as we that are
left grow old.*

*Age shall not weary them, nor the years
condemn.*

*At the going down of the sun, and in the
morning*

We shall remember them."

The trumpet sounded the last post—silence again—then Reveille. It was a tense moment as the lights came up at the sound of the Chairman's gavel.

In his presidential address, Dr. Martin extended a warm welcome to all attending the convention with a special mention for those

returning from the services and those from outside Ontario. He suggested the convention was just the show window of the Association and did not indicate adequately the services performed for the profession by the officers and committees of the Association. He mentioned Public Dental Health and the Benevolence Committees, the Executive Committee with its new Secretary, Dr. Glenn Mitton, the Journal Committee of the Ontario Association with its new editor, Dr. S. L. Honey, and the newly formed Dental Alumni Association under the direction of Dr. John Bothwell. All these, Dr. Martin contended, made a great contribution to professional advancement. Indeed, he pointed out, that the time was at hand when a more adequate permanent staff was imperative if continued progress in achievement is expected.

Dr. Reid graciously acknowledged the invitation of the Ontario Dental Association for a joint convention in Toronto. He thanked the essayists and clinicians who came from the far East to the far West to contribute from their store of knowledge and experience in the scientific program. "We have waited a long time, and wearily perhaps, for this convention" he said—"When our colleagues

would be back with us again. God speed them in their return to practice, with the fullest measure of happiness and enjoyment, as they resume their places among confrères and friends." The speaker commented that this was a National Convention with representatives from every province in Canada. "Indeed" said he, "it is an international Convention" as he presented Mr. E. J. Cloke representing the British Dental Association and referred to the expected visit of Dr. I. B. McNeil, Vice-President of the American Dental Association.

Referring to trends of the time, Dr. Reid suggested this is our "Peace Time" Convention and he found the word "Peace" rather intriguing . . . Unrest and disquieting news from everywhere. "Is it not possible" he said, "that professional groups such as ours have a unique opportunity as leaders in our respective communities? Sometimes I think we do not value our privileges here in Canada enough. There is a real danger of casting aside some of these things which are in good favour with us for some things untried and of doubtful value." Continuing he said, "I am going to be so bold as to say that in no other country do the people receive a higher standard of professional service than here on this continent."

The scientific program included essayists, lecture clinics and scientific demonstrations. There were six formal papers presented before the convention in general assembly. There were more than thirty lecture clinics, most of which were repeated twice and these were presented by lecturers representing schools of thought all across Canada. There were fifty-four table clinics arranged for the instructive enjoyment of Convention Delegates and a goodly number of scientific demonstrations provided by the Dental Trades and Manufacturers' association so that newer products and their use would be familiar to attending dentists. So much could be written about all this but those who were there know it could not possibly be covered adequately in a good sized book.

After a hard day's work came opportunity for fraternal gatherings and social activities. The fraternity and class parties held forth bigger and better than usual. Class 2T1 held their quarter century re-union with more than one half of the original class present. In cele-

brating the occasion a fund of over one thousand dollars was raised to assist a fellow classmate afflicted with ill health.

The "Home Coming" party at Hart House, University of Toronto, was arranged by the Dental Alumni under the direction of Dr. John Bothwell. Over 1100 people attended this delightful function to enjoy an evening of entertainment, dancing and sociability and refreshments. This was a highlight of the Convention when graduates from a few years to many years came back to renew happy memories of familiar haunts.

Another highlight of the convention was the President's dinner and dance presided over by Dr. and Mrs. Harvey Reid. The party was arranged by a ladies' committee convened by Mrs. Reid and Mrs. Frank Martin. Some 600 guests completely taxed the accommodation of the great Concert Hall of the Royal York Hotel.

Perhaps the climax of the Convention was the luncheon meeting of the third day. The Honourable Brooke Claxton was the expected guest speaker. Unfortunately duties called him to New York and Mr. Don Henshaw, well known for his public relations activities, was prevailed on to accept the speaking assignment. Mr. Henshaw made a tremendous impression as he played up the national spirit of Canadians as citizens of a great country.

During the luncheon, Dr. E. W. Paul, beloved teacher and leader in dental thought, was presented with a portrait of himself. Dr. J. H. Johnson made the presentation on behalf of Dr. Paul's many ex-students and friends. Dr. Douglas Tanner presented Mrs. Paul, who was seated at a table nearby with her family, with beautiful flowers. Dr. Paul, quite overcome with emotion, thanked his friends for the wonderful gift and then presented it to Dr. Sidney Smith, President of the University of Toronto, to be hung in the Faculty of Dentistry building. Another presentation occurred when Dr. S. L. Honey, president of Class 2T3, handed a cheque for \$3500. to President Smith as a fund to provide an annual scholarship of \$100.00 applicable to the third year in Dentistry.

In accepting these gifts to the University, President Smith indicated his great pleasure and pointed out that in honouring the University, the graduates of the dental faculty were really honouring themselves.

Throughout the time the Convention was in progress, the ladies, some 400 of them, were enjoying a program of their own. A delightful tea was arranged at Government House at the invitation of Mrs. Albert E. Matthews. On another afternoon a motor tour of the city proved very enjoyable and ended up with tea at Eaton's College Street. These functions, coupled with the Hart House Reception and the President's party, and the closing Fellowship luncheon concluding the convention, rounded out an interesting array of social functions.

The fellowship luncheon was unique in so many respects. Over 300 attended and it was under the able direction and chairmanship of Dr. Perc Lowery. On a huge shield behind the head table, our Canadian Coat-of-Arms was painted in the centre surrounded by the Coats-of-Arms of the nine provinces, and the whole draped with flags. In places of honour at the table sat a representative of each province. Dr. Lowery in asking these special guests to stand before the shield depicted above, suggested the picture before his audience was challenging. Individually each province may have peculiar and special interests but collectively they have a common interest and purpose. Professionally this convention was born to promote a "unity of purpose and action". "Let us all resolve" he said, "to do all in our power to attain for brotherhood of man in general, and our beloved profession in particular, this unity of purpose and action."

Before closing this review some acknowledgements are in order. Never before were so many exhibitors attracted to a Canadian dental meeting. The patronage was wonder-

ful and the support is appreciated. It was a grand display in these days when everything is in such short supply. Then the contributions made by the Dental Nurses & Assistants, the Dental Nurses' Alumnae, and the Dental Laboratory Association were greatly appreciated. Finally a word about those special committees who planned and worked to make the show tick. It was apparent to even the casual observer that every man, with a duty to perform, did it well. To all these, their compensation is the satisfaction of a job well done.

So another milestone is passed. "A Great Job done for National Dentistry" a friend writes. It was an inspiration, and as you return home to your usual tasks, you do feel a little proud you had a part and all who attended contributed at least his presence and his interest. It *was* a great convention.

T. R. M.

Post Graduate Course in Advanced Orthodontics University of Toronto

Arrangements have been completed by the Faculty of Dentistry to have Dr. Robert H. W. Strang conduct this course during the coming University year. The course will include lectures in Theory and Practise together with Clinical Instruction in the use of the Edgewise Arch Mechanism as advocated by Dr. Charles H. Tweed.

Applications should be made at once to The Dean, Faculty of Dentistry, 230 College Street, Toronto. The class is limited to 25 and the fee for this course is \$125.00.

Particulars as to prescribed reading will be supplied immediately to those whose applications are accepted. Apply now.

NEWS FROM THE PROVINCES

ONTARIO

Eastern Ontario Dental Association

This Association will hold its Annual Convention at the Chateau Laurier Hotel in Ottawa on September 16 and 17.

Northern Ontario Dental Association

The Annual Convention of this Society will be held on August 31 at the McIntyre Club in Schumacher, Ontario.

Dean Mason Honoured

At the meeting of the American Association of Dental Schools held in Kansas City, Dr. Arnold D. Mason, Dean of the Faculty of Dentistry, University of Toronto, was named President-elect.

Essex County Dental Association

At the May meeting of this Society, the following officers were elected: President, Dr. Dennis Barkoff; Vice-President, Dr. Roy

Perry; Secretary-Treasurer, Dr. J. D. Scarfone; Director of the Study Club, Dr. W. A. Bourbonnais of Detroit.

2T3 News

The 23rd. Reunion Dinner was held at the Royal York on May 27, with 55 members and 3 visitors present, and Dr. Lee Honey occupying the chair.

After the Toast to the King and President of the U.S.A., we enjoyed an hour of good entertainment which Dr. Bill McLean was instrumental in securing for us and at which he acted as Master of Ceremonies.

A Toast to our Alma Mater was proposed by Dr. Percy Ross of Detroit and responded to by Dr. Don Gullett.

Honorary Membership was conferred on Dr. S. W. Bradley of Ottawa by Dr. Joe Boyd in his own inimitable manner. Joe's poetic and dramatic ability are not waning as the years go by.

On behalf of the Class, Dr. H. E. McKellar presented Dr. Frank Martin with a University Ring as a token of our esteem and pride in having one of our own members President of the O.D.A.

We were happy to welcome Dr. Charlie McLeod from Winnipeg and Dr. Les Hare from Moose Jaw and Dr. Frank Lott from N.Y., also many members who have been in the C.D.C. and whom we have not seen for many a day.

And fellows, the Scholarship Fund went over the Top! At this meeting the Secretary reported \$3157.00 on hand. After some discussion a suggestion was made to pass the hat. This was done and the 55 members present donated the handsome sum of \$318.00 which, with \$25.00 taken from the Class Fund made a total of \$3500.00.

It was with great pride and satisfaction that Dr. Lee Honey on behalf of the Class, presented a cheque for this amount to Dr. Sydney Smith, President of the University of Toronto, who accepted it very graciously and made some kind remarks about the generosity and loyalty which prompted such a gift.

The Class Executive would like to take this opportunity of thanking all those who assisted in raising this Scholarship Fund, particularly those district representatives who were appointed last year and who did such good work

in stimulating interest in their various districts.

Elections were held which resulted in the election by acclamation of President—Dr. Harold Skilling; Vice-Pres.—Dr. Jess Fullerton; Secretary—Dr. Bill McLean; Pres. Skilling will choose a Committee of 4 members later.

J. C. FULLERTON

Ontario Dental Nurses' and Assistants' Association

Ontario Benevolent Fund

"ATTENTION. PLEASE

*The War is over 'tis true,
But, we still have Benevolent work to do
So, save SCRAP AMALGAM and DIES,
Money from this, continues your parties
for GUYS AT THE RED CHEVRON
HOSPITAL.*

The scrap amalgam and amalgam dies may be mailed direct to Mr. J. Costello, Goldsmith Bros., Hermant Bldg., Toronto, Ontario.

Your contributions will be gratefully received, the money being credited to the Benevolent Fund of the O.D.N. & A.A., Mrs. Leta Blaber, Convener.

Hamilton Affiliated Association

April 2:—The following officers were elected: President, Mrs. Mura Seeley; Vice-President, Helen Wilkinson; Secretary, Katherine Keller; Treasurer, Viola Doyle; Recording Secretary, Betty Mills. In May, following dinner at Southgate Dining Room, two nurses conducted a round table discussion on general office routine.

Kitchener Affiliated Association

May 1:—The girls discussed ideas for posters for the Convention and decided to make as many as possible. Refreshments were served by the hostesses Misses Olive Guerin and Charlotte Schendel.

London Affiliated Association

Mr. Charles Pierce of the Ash Temple Company addressed the Association on "The Care of Equipment" in April. At the May meeting convention plans were discussed and the following officers were elected; President, Daisy Walker; Vice-President, Winnifred McKittrick; Treasurer, Mildred Emmerton; Secretary, Mildred Granger.

Ottawa Affiliated Association

March 20:—At a social meeting, the girls played bingo and realized ten dollars from their evening's entertainment. Miss Evadna Whitman, the retiring president, was presented with a beautiful corsage of red roses at the closing meeting at the Chateau Laurier on April 16. The following officers were elected: President, Mrs. Olive Bigelow; First Vice-President, Kay Kirby; Second Vice-President, Addie Campderrosk; Secretary, Pierette Parisien; Treasurer, Kay Patterson.

Dr. Paul Cote gave a very interesting address on the History of Dentistry. The evening closed with a presentation of magic tricks by Mr. Tom Cox.

Toronto Affiliated Association

April 1:—The following officers were elected: President, Tomy Turner; Vice-President, Lura Edwards; Secretary, Margaret Moffat; Corresponding secretary, Muriel Johnston; Treasurer, Elizabeth Brown; Membership Convener, Margaret Nettle; Social Convener, Evelyn Jordon; Welfare Convener, Marie Siliphant; Benevolent Convener, Leta Blaber; Librarian, Madge Buick; Archivist, Marion Edwards.

Windsor Affiliated Association

April 9:—It was decided to have a rummage sale on April 19. Mrs. McKee served refreshments at the conclusion of the business meeting.

Officers of Ontario Dental Association 1946-1947

The following slate of Officers were elected at the recent Annual Meeting of the Association.

<i>President</i>	G. V. Tario
<i>Hon. President</i>	Frank Martin
<i>Vice President</i>	R. P. Lowery
<i>Secretary-Treasurer</i>	Glenn T. Mitton
<i>Archivist</i>	G. V. Morton

Members of the Board of Governors

Russell Woods, Watford; A. R. Poag, Hamilton; H. B. Legate, Owen Sound; D. L. McKerracher, Arnprior; L. M. Grose, Toronto; W. A. Prendergast, Toronto.

Dental Public Health Committee

Members are:

S. A. MacGregor, H. A. Swales, J. C. Devitt, Hugh McLaren, W. G. McIntosh.

Benevolence Committee

Members are:

Russell Hyde, R. S. Woollatt, J. A. Bothwell.

University Alumni Election

Dr. John A. Bothwell, president of the Toronto Dental Alumni has been elected as Vice President of the University of Toronto Alumni for year 1946-1947.

QUEBEC

Montreal Dental Club

May 20:—Dr. J. C. Flanagan gave a paper on Mouth Re-Construction. His technique is as follows: Impressions are taken of the upper and lower arches and models poured. The lower mould is mounted on an anatomical articulator using a kinematic face bow. Face bow and fork are attached to the lower arch by means of soft wax and the face bow is adjusted until the points describe an arc over the temporomandibular joint. This is then transferred to the articulator.

Wax bites are taken in centric, right and left lateral and protrusive positions. The patient is not permitted to bite through the wax. The upper model is mounted in centric with the condylar inclination arbitrarily set at 15°. The amount of opening is determined and the other three bites are used to set the angles of the incisal guide table.

A thin layer of lead foil and wax is next placed over the posterior teeth and obstructing cusps are ground away leaving a hole in the wax until no tooth obstructs the free movement of the jaws in the open bite position. The wax bites are returned to the mouth and the cusps of the natural teeth which protrude through the holes in the wax are marked and ground away.

New impressions are then taken and new models made and remounted on the articulator.

Four silver cap splints are then made to cover the posterior teeth. If the opening of the bite is sufficient, an arbitrary 30° curve of Spee is used to balance the occlusion. If the

natural teeth interfere with this, the curve is taken from the remaining natural teeth. In order to carve these splints, two metal skates are made with the required curvature and mounted on the upper portion of the articulator. The articulator is then moved about and the skates carve the required curve on the lower splint. The upper splint is then made to the lower.

The splints are then placed in the mouth and cemented in place. To all intents and purposes, the new bite has now been established. If all is satisfactory, the splints are removed one at a time and the natural teeth built up with bridges, inlays and onlays as required.

Dr. Flanagan stressed the need for this type of work in the average practice. He maintained that this type of dental treatment should not be regarded as a luxury.

At this meeting tribute was paid by the president, Dr. A. W. Mitchell, to the late Dr. Malcolm Fluhmann who passed away very suddenly on May 11. Silent tribute was also paid to his memory by all members present.

Montreal Dental Nurses' Association

May 21:—Dr. J. W. Abraham, "A" District Supervising Dentist of the Department of Veterans' Affairs told something of the working of his department and the magnitude of the task of getting adequate dental treatment for all returned service personnel. He congratulated the dentists and nurses of this district on the help and co-operation he had received from them in getting this work done.

OLIVE GOODENOUGH

NEW BRUNSWICK

Moncton Dental Society

At the May meeting of this Society the following officers were elected; President, Dr. Arthur LeBlanc; Vice-President, Dr. R. H. Bingham; and Secretary-Treasurer, Dr. V. F. Hudson.

BRITISH COLUMBIA

B. C. Dental Association

May 11:—The annual meeting started with breakfast at 8:15 when Ernest M. Jones, D.D.S., F.A.C.D., the new Dean of the

School of Dentistry, University of Washington gave some very interesting facts on the "Dental School Curriculum".

Earl Pound, D.D.S., Commander D.C., U.S. N.R., formerly of Vancouver, now of Los Angeles, gave a very fine talk and showed interesting colour pictures on "Oral Prostheses for Battle Casualties".

Saul C. Robinson, D.M.D., of Portland, Oregon, gave a splendid chair clinic and lecture on "Lower Impression Technique".

From Washington the following contributed: Drs. D. A. Spratley of Mount Vernon on "Gold Inlay Preparation and War Pattern Class 2 Cavity"; Chester M. Allen of Seattle on "Cast Gold Inlay Technique"; Cecil F. Lindley of Seattle on "Hollenback's Vacuum Inlay Investing Technique"; J. F. Hoelscher of Seattle on "Indications and Contraindications for Acrylics in Restorative Dentistry"; R. E. Hampson of Seattle on "Gold Foil Chair Clinic Class 2 Restoration".

Members of the B.C. Dental Association who contributed to the program were; Drs. Gerald L. Plant; A. J. Garesche; Hamilton E. Simmons; R. L. Scharff; Lloyd Chapman; J. C. Foote; William Miller; J. R. Ingledew; G. R. Nimmons; F. L. Jacobson; J. A. Chambers; C. M. Whitworth; M. M. Chechik; and J. E. Lukas.

The Vancouver Dental Assistants' Association represented by Doreen Lewis put on a clinic on "Laboratory Technique for Developing and Reducing X-Rays".

A film on "Production of Penicillin" was much enjoyed.

Dr. W. F. Windle, Director, Department of Anatomy University of Washington, addressed the evening meeting. A number of representatives of the medical profession were present at this session.

The following were elected to guide the destinies of the Association during the coming year:

President—J. A. Chambers

President-elect—T. H. Johns

Secretary—G. A. C. Walley

Treasurer—R. L. Pallen

Board of Censors—Drs. L. G. Robinson,

Lloyd Chapman, and Alex Gunning.

The golfers, true to form, did not let the opportunity pass to match strokes, with the result that the following carried off proof of

their prowess: Drs. Dick Butler and Frank Kenny of New Westminster.

Vancouver & District Dental Society

May 2:—A golf tournament was followed by dinner and a business meeting.

A letter from the Vancouver Dental Assistants' Association was read thanking the members for their contributions to aid in sending a delegate to the National Convention in Toronto.

The election of officers for the ensuing year resulted as follows:

President—Dr. J. Ingledew

President-elect—Dr. E. Nordin

Secretary-Treasurer—Dr. K. R. McWilliams

Board of Directors—Drs. Morton Hanna, Hamilton Simmons, T. J. Hackett, and W. D. MacLeod.

Golf prizes were presented as follows: Leach Trophy, Dr. Dick Butler for low gross; Century Cup presented by Gerry Splatt of the B. C. Dental to Dr. F. P. Kenny; Ash-Temple Cup presented by E. E. Rogers to Dr. Walt Julian.

Other prizes were presented by Dr. Dick Butler of the Golf Committee to: Drs. Lloyd Chapman, G. Creasy, S. McQueen, D. Seale.

The new President, Dr. John Ingledew gave a brief address, following which the meeting was adjourned.

Victoria Dental Society

March Meeting:—Dr. B. E. Nickells, orthodontist of Vancouver, gave an excellent talk on "Some Thoughts on Occlusion".

April Meeting:—Dr. Hagen of Seattle, presented a helpful table clinic, covering the use of acrylic for jacket crowns and bridges. The Society was pleased to welcome Dr. M. H. Garvin, Winnipeg, Editor of the Journal of the C. D. A., as a guest. Dr. Garvin kindly favoured the members with a short talk on "The Past, Present, and Future of Dentistry". He outlined clearly some of the problems and responsibilities of the profession.

In the same month, the annual dance of the Society was held at the Royal Victoria Yacht Club. Drs. Arthur Poyntz and J. F. Mercer were in charge, and to them the credit goes for an enjoyable evening and a good attendance.

May 19:—The spring golf tournament was held under the direction of Drs. Poyntz and

H. R. Turner. Prize winners were as follows: Ash-Temple cup for low gross, Dr. J. D. Calvert; B. C. Dental cup for low net, Dr. H. C. Gill; E. W. Hetherington cup, Dr. H. R. Turner; Highest net score, Dr. Ian Hamilton. Other prizes were won by Drs. Mercer, McDonald, Milburn, and Cheney.

May 27:—At the annual meeting, the President, Dr. W. A. McDonald stated that the membership had increased from 38 to 47 being now the highest in the history of the Society.

The following were elected as officers for the 1946-47 term

President—Dr. Dimery Johnson

President-elect—Dr. Alex Gunning

Secretary-Treasurer—Dr. H. R. Turner

Executive—Drs. T. H. Johns, H. C. Gill, and Sam Youlden.

The Vancouver Dental Assistants' Association

May 11:—At the B.C. dental convention the Doctors' clinics in the morning were followed by a luncheon with sixty nurses attending including several out of town girls. During the luncheon the radio entertainers Lulu Rose and Ernest Adams, accompanied by Jack Emerson at the piano, displayed remarkable vocal skill. Mr. Arthur A. Seger, delivered a most enlightening address on the University of British Columbia. Mr. Seger then assisted in the drawing of numerous door prizes, the lucky girls being more than delighted with their lovely gifts. The wishes for a grand and successful trip were expressed to President Rita Cowan as she was about to leave to attend the convention in Toronto as delegate from B.C. Doreen Lewis, assisted by Anne McWilliams displayed a very worthwhile table clinic on "Laboratory Technique for Reducing and Developing X-Rays".

RITA RUSSELL

Victoria Dental Assistants' Association

Feb. 4:—With sixteen members present, the President, Miss May Warnock welcomed two new members into the organization.

On behalf of the members, Miss Ruby Donald moved a sincere vote of thanks to Miss Marjory McLennan for the honour she had bestowed on the Association by winning the Out-of-State Cup and an additional prize of a twenty-five dollar war bond for the best clinic presented at the Washington State

Dental Assistants' Convention held in Seattle on Feb. 1-2.

Miss. M. Patterson, the guest speaker, invited the members to accompany her to the x-ray department of the Jubilee Hospital where she gave a practical demonstration of the workings of x-ray and physiotherapy.

April meeting:—Miss Jean Fraser was appointed as delegate to the British Columbia Dental convention.

The proposed Constitution of the Canadian Dental Nurses' and Assistants' Association was read by Miss Ruby Donald.

JEAN FRASER

ALBERTA

Edmonton Dental Society

May 7:—Dr. M. M. Dunsworth spoke on "Present Day Office Management Problems".

The following slate of officers was elected for the 1946-47 term:—

President, Dr. J. Cecil Ward

Vice President, Dr. P. J. Kendal

Sec.-Treas., Dr. R. A. McEwan

Social Convener, Dr. W. A. McIver

Dr. S. M. Snedden, a veteran Edmonton dentist who graduated in 1899, is retiring and leaving the city to live in Ontario. A gold fountain pen was presented to him by Dr. M. A. McIntyre.

MANITOBA

Fused Teeth

The accompanying x-ray photograph shows a lower deciduous cuspid and lateral fused together in a child four years of age. The case was submitted by Dr. R. G. Hurton of Glenboro, Manitoba.



Dr. Croll Honoured

May 15:—Dentists of Brandon and vicinity gathered at Souris to honour Dr. H. A. Croll on having entered his fiftieth year of practice. Dr. E. H. Clark of Minnedosa presented Dr. Croll with a gift on behalf of the gathering.

We are now in the midst of some reconversion and its attendant economic upsets. Your patients, many of whom are not permanent residents of your town and adjacent territory, will begin to drift to other communities.

Overtime wages are gradually disappearing and many of them do not have the excess funds that they had during the past few years. Accounts will have to be watched from now on more carefully than has been necessary in recent times.

Unless this is done you can easily wake up one day with many past due accounts on your books and patients gone.

—Lloyd Dodd in Ill. D. Jour.—

EMPIRE NEWS

GREAT BRITAIN

Remuneration of General Medical Practitioners

Condensed from the report of the Inter-Departmental Committee presented by the Minister of Health and the Secretary of State for Scotland to Parliament, May 1946.

The Committee was instructed to obtain whatever information and evidence it thought fit, what ought to be the range of total professional income of a registered medical practitioner in any publicly organized service of general medical practice; to consider this with due regard to what have been the normal financial expectations of general medical practice in the past, and to the desirability of maintaining in the future the proper social and economic status of general medical practice and its power to attract a suitable type of recruit to the profession; and to make recommendations.

It was found that between the ages of 40 and 55, that is throughout the best years of a general practitioner's working life, almost 20 per cent of urban practitioners had a net income under £700 a year, and over 40 per cent had a net income of under £1000. Having regard to length of training, to the arduousness of the general practitioner's life compared with that in other professions, to the greater danger to health (in 1931 the mortality among doctors between the ages of 20 and 65 was 54 per cent above that of higher civil servants and 26 per cent above that of professional engineers), to the skill and other qualities required and to the degree of individual responsibility, we are unanimous in holding that the percentages of low incomes are too high. Having regard to the same facts, we are clear also that the proportion of practitioners able to reach a net income of £1,300 or over is too low. We consider that unless conditions are substantially improved in both these respects, and on the basis of a pre-war value of money, the social and economic status and the recruitment of general medical practice could not, in the long run, be maintained. We believe that this would be so even apart from proposals for a publicly organized general medical service.

We are satisfied that there is a far greater

diversity of ability and effort among general practitioners than admits of remuneration by some single scale applicable to all. If the recruitment and status of the profession are to be maintained men must be able to feel that more than ordinary ability and effort receive an adequate reward. On the other hand, a reward which would be appropriate when these exist would be extravagant when they do not. In consequence, we are clear that any satisfactory system of remuneration must involve differentiation dependent on ability and effort.

The evidence put before us showed that capitation affords a method of differentiation which is acceptable to the majority of the profession. Other methods, however, may prove acceptable or may be preferred for other reasons. In consequence, we desire to emphasize as strongly as possible that, while we assume in the discussion which follows that incomes are dependent at least to a substantial extent on the number of patients for whom a practitioner is responsible, we do so merely because this is a possible method, and the most obvious method, of securing such variations of income as are necessary if different degrees of ability, effort and resulting work are to be suitably remunerated.

We accordingly recommend, in respect of a publicly organized service, that:—

(1) A scheme should be devised which will ensure that between 40 and 50 years of age approximately 50 per cent of general practitioners receive net incomes of £1,300 or over, and which will also secure, so far as practicable, that between 40 and 50 years of age approximately three-quarters receive net incomes over £1,000, that approximately one-quarter receive net incomes over £1,600, that slightly less than 10 per cent receive net incomes over £2,000 and that, in a small proportion of cases, it is possible to obtain net incomes of at least £2,500. We are expressing our recommendations in terms of the 1939 value of money.

The above proposal is approximately equivalent to the augmentation of net incomes in 1939 by £200 in the case of incomes between £400 and £1,200 and, in the case of incomes over £1,200, by £200 at £1,200, dim-

inishing progressively to nothing at £2,000.

We say nothing about reducing the high percentage of incomes below £700 since this would follow automatically from the operation of these recommendations.

Additional remuneration should be given in areas which prove so unattractive as not to draw an adequate supply of practitioners.

An adjustment in the method of payment in

so far as this depends on capitation should be made in the case of practices involving an altogether abnormal number of aged persons and chronic invalids.

On completion of resident hospital appointments a recently qualified practitioner should secure an initial net income of not less than £500 p.a., as an assistant to a doctor in general practice.

The National Health Service Bill

Excerpt from Editorial in Br. D. Jour. April 5, 1946.

It is difficult to avoid the conclusion that the Government is aiming deliberately at the ultimate extinction of private practice as we now know it and the concentration of all dental treatment into health centres staffed by salaried officers. Such a consummation would be contrary to the best interests of the patients themselves and might well have a disastrous effect on the progress of dental science in this country if, in fact, it led—as it well might—to treatment becoming standardized

to an undesirable degree. Nor must it be overlooked that what would, in effect, constitute a threat to convert a highly individualized profession into a band of civil servants might produce serious repercussions on the rate of recruitment for the profession, at the very time when it is important that this should be stimulated as much as possible in order to meet the maximum demand for treatment that might be created as a result of the introduction of the comprehensive service.

GENERAL NEWS

Barbiturate Prescription

Druggists may repeat a barbiturate prescription if the physician, dentist or veterinary surgeon marks on the prescription "repeat" the minister of National Health and Welfare, the Hon. Brooke Claxton, has pointed out.

The number of times which the prescription may be repeated should be clearly set forth on it, Mr. Claxton added. If the prescription states "repeat as needed", the onus is then on the person who issued the prescription—not on the pharmacist who fills it. The only situation under which an unmarked prescription may be repeated is for the pharmacist to verify with the issuer as to whether or not a refill may be made.

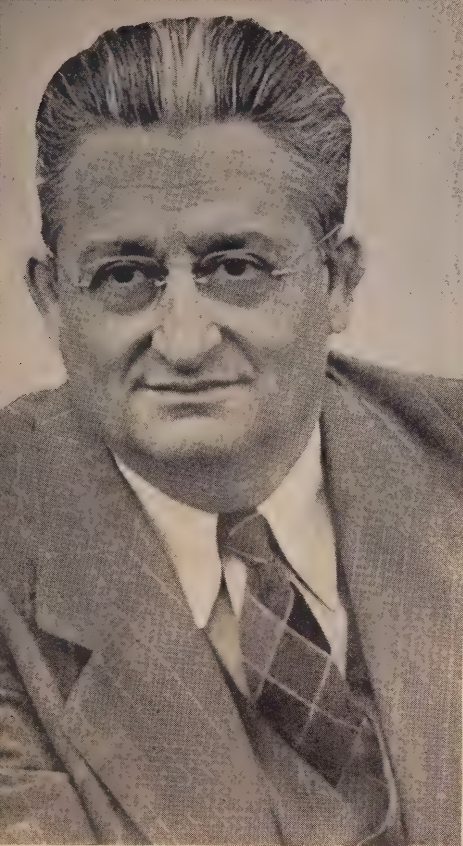
40 Universities do Research on Family Medicine Chest

Scientific research, financed by the manufacturers of packaged medicines, is presently being undertaken in more than 40 universities and colleges.

"The ingredients of the family medicine chest, and the ailments associated with them are the subject of continuing research in universities and medical schools, as well as in private and commercial laboratories and in the laboratories maintained by the packaged medicine industry".

The industry's entire outlay on research of every kind amounted to more than \$10,000,000. in 1945 according to the Bulletin of Pharmacal Information.

Unable to throw away books, papers, manuscripts, Thomas De Quincey accumulated vast literary snowdrifts. When tables, chairs, bed, floor were entirely encumbered, and even the narrow path between the door and the fireplace had become silted up, he would simply lock the door of his room and take another lodging, until once more driven on by a similar state of affairs. At his death no fewer than six sets of lodgings were found in this condition. — Henry Hazlitt in the "New York Times."



DR. RENE ROCHON

New Dean at University of Detroit

Dr. René Rochon, formerly of Montreal, has been appointed Dean of the Faculty of Dentistry, University of Detroit. He was born in Montreal in 1898 and was graduated from the Royal College of Dental Surgeons of Ontario in 1921 and from University of Michigan in 1923. He received his B. A. degree from Wayne University in 1929 and his M.S. degree from University of Michigan in 1930.

Dr. Rochon was Associate Professor of Operative Dentistry and Director of Clinics in the University of Detroit before receiving his present appointment.

He is Chancellor of the Knights of Columbus and President of the Speakers' Club. He is a member of the Psi Omega Fraternity and was also Grand Master and Deputy Councilor of the O.K.U. Fraternity in 1942.

Dr. Rochon served overseas with the Canadian Army Dental Corps, 1917-18.

Prepared Medicines—Old and New,

by L. P. Teevens, Chief, Proprietary or Patent Medicine Division, Department of National Health and Welfare.

Condensed from Canada's Health and Welfare.

The healing methods of thousands of years ago began in mystery and superstition. Progress was encumbered with ignorance and quackery. Animals were often worshipped by the ancient people, and almost every conceivable animal known was used in medicine with doubtful, if any beneficial effect.

The Egyptians treated childhood diseases by administering a skinned mouse. Mummies of children are found today with the remains of a mouse still in the stomach. The same "remedy" was given centuries later as a preventive against toothache. Primitive man ate the organs of animals because of a believed mystical virtue. Today animal substances are not used on the basis of mysticism but upon knowledge acquired through scientific investigation.

The same may be said for the remedies of vegetable origin. Early man believed that trees and plants were the abode of spirits and that eating the plant and drinking its juice brought the virtue of the spirits to the human flesh. Almost every plant on the earth has been used in the treatment of disease. Most have no virtue, but the early type of medical practice made no discrimination in such matters.

Early man found that the spirits in some vegetable substances were really harmful, and even deadly to the human body. The medicine man dealt with them in his practice of black magic, and in the middle ages the compounding of poisons was regarded as a fine art, useful to scheming nobility to rid themselves of those who stood in the way of their ambitions.

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U.S.A. Dental School Enrolment

Freshmen enrolment in the U.S.A.'s 40 dental schools next October will be the largest in 20 years according to Dr. H. H. Horner, Executive Secretary of the Council on Dental Education of the American Dental Association.

Preliminary reports indicate that the 1946 freshman enrolment will exceed 3,000 students, two and one-half times that of October last year when only 1,201 freshmen entered dental schools—a 20 year low.

Dr. Horner pointed out that the upward trend in enrolments is the first sign since the beginning of the war that the number of new dental graduates will keep pace with increases in population. Even at the accelerated enrolment, he said, the nation faces a shortage of dentists for the next 15 years.

Postextraction Implantation of Crystalline Penicillin Sodium

by Harvey A. Stone, D.D.S., New York City
Summary of paper in Jour. A.D.A. May 1, 1946.

When an alternate series of fifty-three cases of lower third molar pericoronitis was subjected to direct post-operative implantation of 100,000 Oxford units of undissolved crystalline penicillin, there was apparently a reduction in the degree of postoperative pain and edema.

Group Insurance

The American Dental Association group insurance now exceeds \$30,000,000 of insurance in force, through which nearly \$3,500,000 has been paid to beneficiaries since the inception of the plan.

Scholarship Award

The Council on Dental Therapeutics of the American Dental Association has announced the award of \$500 to Dr. Arthur B. Gabel of the School of Dentistry, University of Pennsylvania, Philadelphia, to assist in research in the functions of dentine in the human tooth.

Discovery of new data of innervation of the dentine may lead to improved control of the discomfort associated with certain dental operations and treatment of eroded teeth, members of the Council on Dental Therapeutics pointed out.

Social Welfare

Dr. J. B. Grant of the Rockefeller Foundation told the Dominion Council of Health at its 49th meeting that social welfare services aim at removing insecurity by regarding the national income as a public concern and by sharing that income to remove the causes of social insecurity. He pointed out that in Sweden the government was providing anywhere from 20 to 30 per cent of the rent, depending on the number of children.

IN MEMORIAM

Malcolm Adolphe Fluhmann, of Montreal, Quebec, aged 44, died May 11. He was graduated from the Université de Montréal in 1923 as one of the youngest dentists that ever came out of that institution.

He was a well known practitioner and had a brilliant career, keeping abreast at all times with all technical advances. He was an active member of the Montreal Dental Club.

Dr. Fluhmann is survived by his widow, two sons, and a sister.

Karl F. Woodbury, of Halifax, N. S., aged 53, died May 24. He was graduated from the Faculty of Dentistry of Dalhousie University and practised in Halifax for a number of years before the First World War. During that conflict he served overseas with the Canadian Army. He was a member of the Royal Nova Scotia Yacht

Squadron and other Halifax organizations.

Dr. Woodbury was the son of the late Dr. and Mrs. Frank Woodbury of Halifax. He is survived by his widow and one son.

Frank Dolan Tepoorten, of Vancouver, B. C., aged 43, died May 6. He was graduated from the Oregon School of Dentistry at Portland.

He was a member of St. Peter and St. Paul Roman Catholic Church. He was also a member of the Kiwanis Club and Marine Drive Golf Club and manager of the Kerrisdale ball club.

Dr. Tepoorten is survived by his widow, a daughter, four brothers and a sister.

Jacob Romer, of Toronto, Ontario, aged 58, died suddenly from coronary thrombosis, June 6, while driving his car. His wife was with him at the time.

La Restauration des Surfaces Proximales des Molaires Temporaires, par la Technique Dite "Willett's Type Inlays"

par JEAN BRAULT, D.D.S., L.C.D., S.-Lambert, Qué.

Le matériel employé le plus souvent pour la restauration des dents temporaires est l'amalgame ordinaire. Pour les dents, ayant une carie simple ou une cavité simple sur une surface facile d'accès, c'est le matériel idéal pour les raisons suivantes:

- 1) Fraisage modéré de la structure de la dent.
- 2) Durée et résistance de la substance obturatrice aux chocs masticatoires.
- 3) Manipulation facile et simple du matériel.
- 4) Economie de temps pour le dentiste, à cause du peu de temps requis dans la préparation de la cavité et dans l'insertion de l'obturation.
- 5) Les honoraires demandés sont à la portée de la moyenne des patients.

Tout de même, quand il y a présence de carie proximale et que l'on doit fraiser la surface occlusale des dents temporaires, pour avoir accès à la cavité, l'emploi de l'amalgame d'argent, comme matériel d'obturation est presque contre-indiqué parce que:

1) La préparation classique d'une cavité composée sur les dents temporaires demande un fraisage bien déterminé de la surface occlusale et de la surface proximale. L'amalgame, qui est une matière cristalline doit être retenu,

rétenitif et suffisamment fort pour subir les chocs masticatoires, même dans une bouche d'enfant.

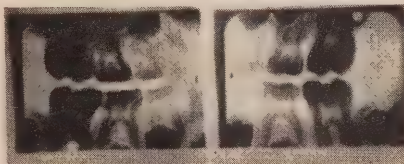


FIGURE No 1

2) Il faut que la masse de matériel soit assez volumineuse pour avoir des bords résistants.

3) L'opérateur doit préparer la cavité d'une manière minutieuse, pour ne pas exposer les cornes de la pulpe ou la pulpe elle-même.

4) Le temps requis pour bien faire ce travail dans la bouche d'un enfant est assez long. Cette préparation de cavité est souvent douloureuse et devient une corvée, même chez un enfant bien disposé envers le dentiste. Ce même petit patient ne devrait pas être soumis à cette tension.

5) Une matrice quelconque doit aussi être employée pour avoir un contact parfait du métal aux quatre parois de la cavité. Les illustrations 1-2-3 (Fig. 2) sont tirées du manuel "Dentistry for Children" des docteurs Brauer, Higley &

Boyd, illustrant la préparation idéale de la cavité Classe -II- proximo-occlusale pour obturation en amalgame d'argent.

Les illustrations 4 et 5 (Fig. 3) sont des dessins du docteur Charles A. Sweet, montrant la préparation de cavité pour le même genre d'obturation.

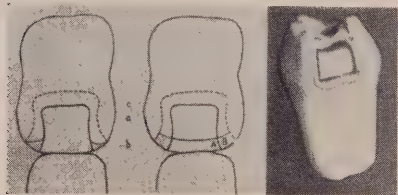


FIGURE No 2

Une étude des coupes mésio-distales et bucco-linguales des molaires temporaires (1^{ère} et 2^{ème}) (Fig. 4) montre: 1) la dimension de la chambre pulpaire; 2) la position et la dimension des cornes de la pulpe; 3) l'épaisseur de l'émail et de la dentine de la surface occlusale à la chambre pulpaire et l'épaisseur des parois latérales. Ces détails ont leur importance dans la préparation de la cavité.

La préparation de la cavité aux surfaces proximales ne doit pas excéder plus de 1 à 1½ mm. Autrement, il y a danger d'exposer la pulpe, spécialement à la face mésiale. La préparation occlusale peut être étroite et profonde, mais pas trop large, car ici encore il y a danger d'exposition de la pulpe.

Alors, quelle est la solution à ce problème? Quelle méthode sûre et certaine y a-t-il, à notre disposition, pour restaurer les cavités de classe II dans les dents temporaires? A mon avis, la technique du Docteur Willett, au moyen d'incrustations coulées, est la méthode idéale et en voici les raisons:

1) Les surfaces préparées sont à une certaine distance de la chambre pulpaire. Le fraisage est fait sur la surface externe de la dent et ne pénètre presque pas dans l'émail.

2) Au point de vue de la conservation des tissus, très peu de la structure de la dent est coupée.

3) Les points de contact sont forts,

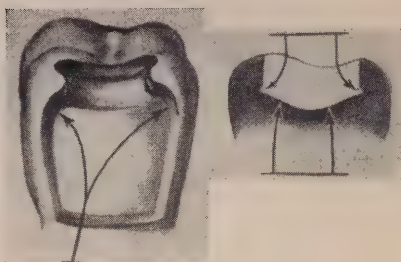


FIGURE No 3

bien déterminés, ne s'effriteront et ne casseront pas.

4) Les surfaces préparées et couvertes par ce type d'incrustation prévient la formation de carie sur ces surfaces.

5) Moins de douleur pour le petit patient.

6) La technique est simple.

7) Deux cavités peuvent être préparées en même temps sur deux dents avoisinantes. Presque toujours, si nous trouvons de la carie sur une surface proximale nous en verrons sur la dent voisine. (Fig. 1)

8) Economie dans le temps exigé pour l'opération.

9) Si on démontre aux parents de l'enfant, le besoin et les avantages à garder les dents temporaires pour un temps défini et si on leur prouve la supériorité de la restauration, ces mêmes parents seront consentants à payer de meilleurs honoraires pour une meilleure restauration, qui est cet inlay, dit de Willett.

10) Les matériaux et les instruments employés pour cette préparation se trouvent dans tous les cabinets dentaires.

LE TYPE D'INLAY "DIT DE WILLETT"

La technique est simple et est employée pour la cavité proximale, là où l'accès de cette cavité doit être obtenu par la surface occlusale et pour la cavité proximo-occlusale, qui n'est pas trop grande, (moins que la ½ de la dent).

A) PREPARATION DE LA CAVITE

1^{ère} phase: A l'aide d'une pierre montée, "Knife Edge", ¼" de dia-

mètre (Popper Stone No 140-141 ou S.S.W. No 55 ou 56) à mandrin de petite dimension placée sur le contre-angle.

dans l'émail avec la même pierre. (Popper-140-141 ou S.S.W. 55-56.)

2^{ème} phase: En partant du sillon occlusal, dans le centre de la fissure mésio-

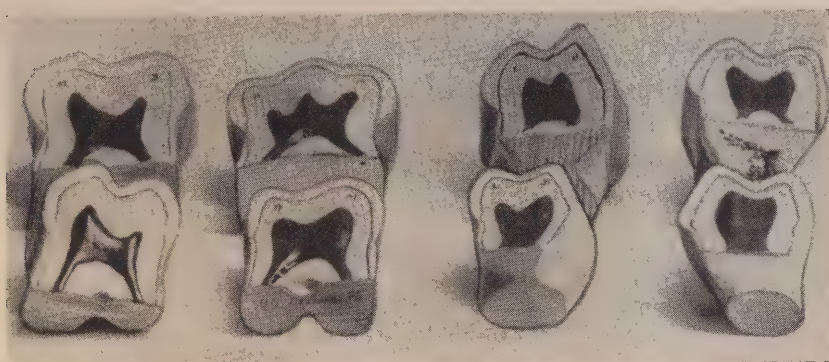


FIGURE No 4

(Fig. 6). Coupez ou taillez des sillons bien définis sur la surface buccale et linguale de la lière molaire temporaire, à angle droit de la surface occlusale et à quelque distance de la cavité. Cette taille est faite dans la substance saine de la dent.

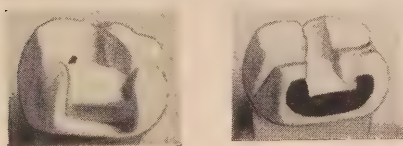


FIGURE No 5

Ce sillon taillé doit s'étendre de la surface occlusale jusqu'à la plus grande convexité de la dent, mais pas au-delà et à travers la surface de l'émail.

Si la deuxième molaire temporaire porte aussi une carie proximale ou proximo-occlusale, taillez cette dent (sillon) de la même façon, buccalement et linguement; les sillons buccaux et linguaux devront être parallèles l'un à l'autre et aussi parallèles à l'un et à l'autre de l'autre dent.

Les sillons buccaux et linguaux doivent être taillés à même les sillons naturels de la dent. Joignez ensuite les sillons buccaux et linguaux par un autre sillon sur la surface occlusale, en pénétrant

distale, on taille vers la surface cariée, en passant à travers les bords marginaux de la cavité. On utilise la même pierre montée "Knife Edge". On fait les mêmes mouvements sur la dent voisine, si elle est cariée, en observant bien un parallélisme des surfaces taillées bucco-occluso-linguales.

3^{ème} phase: La pierre montée est enlevée du contre-angle et est changée pour une petite pierre montée $\frac{1}{4}$ cylindrique (Popper-206 ou 207, ou S.S.W. 48 ou 53). Cette pierre est passée dans le sillon déjà taillé dans la fissure mésio-distale sur une dent et ensuite sur l'autre.



FIGURE No 6

4^{ème} phase: Sur la surface proximale, où la cavité se trouve, on obtient une coupe à l'aide d'un disque fin de papier sablé, sec ou humide de $\frac{5}{8}$ " de diamètre; on enduit le bord du disque de cire d'abeille pour obtenir un meilleur glissement et prévenir l'engagement du

disque entre les dents, en évitant de blesser les tissus mous. Après cela, passer un disque de papier sablé de grain plus gros jusqu'à ce qu'on ait obtenu une coupe de 1mm. approximativement sur chaque dent.

Si la carie est profonde, bien nettoyer la cavité, stériliser au phénol, et remplir la cavité avec un ciment ordinaire ou une pâte d'Oxyde de Zinc et Eugénol, laisser durcir et ensuite, avec un disque à grains fins, compléter la coupe.

Les sillons buccaux et linguaux étant bien parallèles, les creuser un peu et les polir avec une fraise no. 701 ou 700 de dépouille pour incrustations.

Le sillon occlusal est équiné à l'aide d'une petite fraise à finir no. 706, en passant la fraise à angle droit à la surface occlusale. Ce travail terminé, la préparation de la cavité prend plus de temps à la décrire qu'à la faire.



FIGURE No 7

TECHNIQUE DE L'IMPRESSION

1ère phase: Voici la préparation des cavités terminée. Prenez un porte-empreinte de Willett ou encore un porte-empreinte à pont ordinaire, que vous

complètement le stent. Les surfaces qui montrent l'impression des dents préparées sont grattées, laissant un indice des dents mésialement et distalement aux préparations. Le stent est maintenant séché avec un courant d'air froid et partout où le matériel à empreinte a été coupé ou gratté, on y applique une mince couche de stent vert de Kerr.

2ième phase: Passez le porte-empreinte contenant le tout au-dessus d'une flamme trempez-le dans de l'eau chaude à 140° Fahrenheit, pour tempérer le stent, et remplacez l'impression en place en vous servant des points de repaire dans le stent rouge comme guide. Pressez légèrement en place. Tenez l'empreinte fermement et refroidissez-la complètement. Enlevez-la à angle droit de la dent préparée. (Fig. 10)

Les dentistes familiers à l'usage des substances hydro-colloïdales peuvent se servir de ce matériel à la place du stent vert ou blanc, et ainsi obtenir une empreinte avec des détails précis. En se servant de substances hydro-colloïdales, après que le stent rouge est séché et refroidi pour la réception du second matériel à empreinte, on utilise un peu de chloroforme sur un rouleau de coton pour essuyer le stent afin que la substance hydro-colloïdale adhère mieux à celui-ci. Aussi les dents préparées doivent être asséchées afin qu'il n'y ait pas de bulle d'air dans l'empreinte.

COULEE DU MODELE

On coule le modèle généralement avec du Cristobalite ou encore avec de la

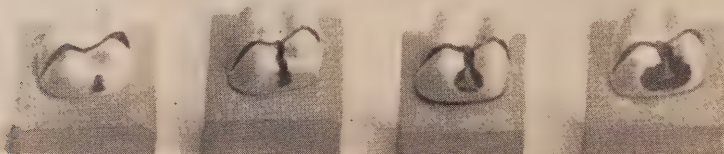


FIGURE No 8

pierre Ransom & Randolph. Mélangez la pierre de coulée à la consistance de crème épaisse. Le modèle se coule comme à l'ordinaire, ayant soin de former une base à ce modèle. Laissez durcir com-

plètement le stent. Les surfaces qui montrent l'impression des dents préparées sont grattées, laissant un indice des dents mésialement et distalement aux préparations. Le stent est maintenant séché avec un courant d'air froid et partout où le matériel à empreinte a été coupé ou gratté, on y applique une mince couche de stent vert de Kerr.

plètement pendant quelques heures. Quand le modèle est dur, enlevez le porte-empreinte, mettez l'impression dans l'eau chaude à 140° Fahrenheit. La chaleur de l'eau doit être tolérée par la main. Laissez le stent s'amollir complètement et enlevez-le délicatement afin de ne pas briser le modèle à des parties importantes. Taillez le modèle tel qu'il lustré. (Fig. 11)

plété quant à la forme, point de contact et contour de l'incrustation finie. La dent avoisinante, qui possède une cavité pour incrustation, est maintenant cirée. En rapprochant les parties fracturées du modèle de temps à autre, on rétablit le point de contact. Il est sage d'enduire la première cire avec un peu de vaseline pour que la cire sur la deuxième dent ne colle pas à la première.

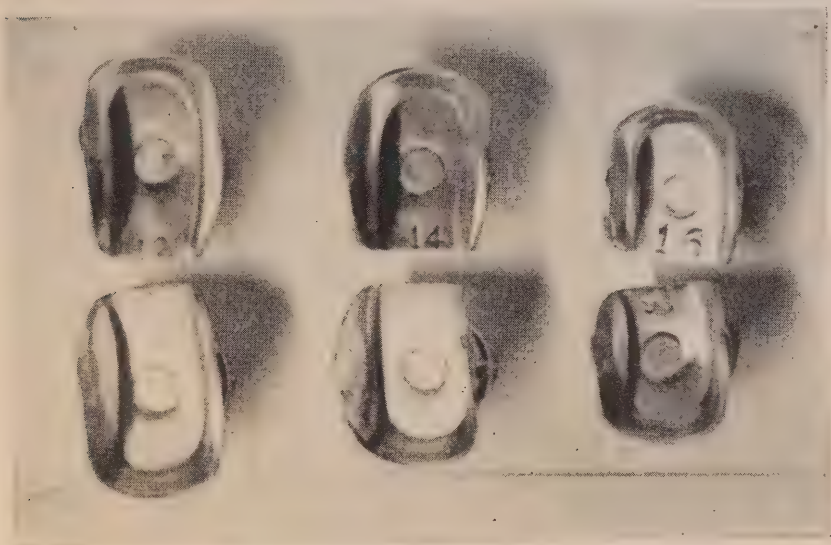


FIGURE No 9

CIRAGE DU MODELE

Après le séchage complet du modèle, cirez une des cavités préparées. Encochez

Les dents cirées sont coupées du modèle avec une scie à plâtre et la tige de coulée posée à la partie la plus proéminente. Plonger le modèle dans l'eau

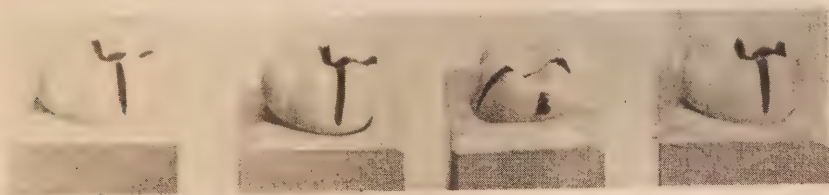


FIGURE No 10

le modèle aux surfaces buccales et linguales, à la partie interproximale. (Fig. 11.) Fracturez le modèle à cet endroit. Le cirage de la dent est maintenant com-

froide, afin que ce modèle soit à son tour complètement imbibé d'eau, investir avec le même matériel, qui a servi à faire le modèle.



FIGURE No 11

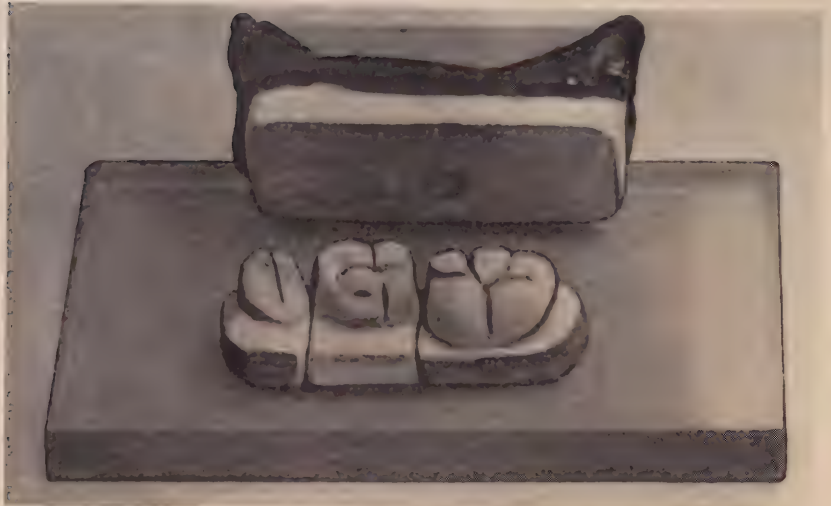


FIGURE No 12

Le coulage se fait avec de l'or moyennement dur. Chaque coulage coûte à peu près \$0.50. D'autres substituts peuvent être employés pour le coulage.

La seule surface qui demande à être ajustée dans la bouche est la surface occlusale.

Le Dr. Willett, dans un récent article, affirme que: "Quand on prépare des restaurations proximales sur des dents

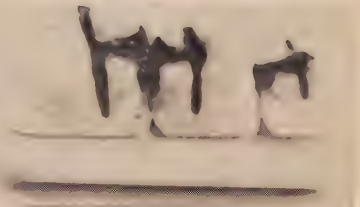


FIGURE No 13

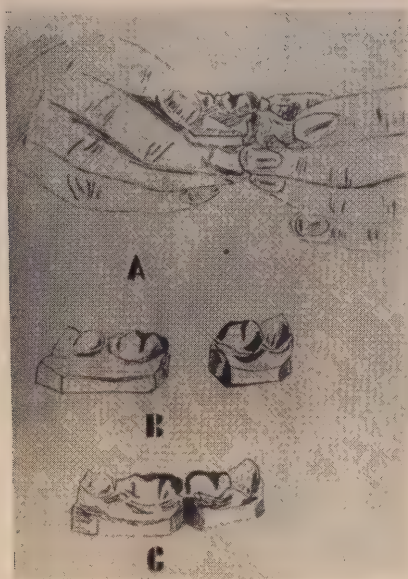


FIGURE No 14

temporaires, on devrait essayer de compléter le tout dans la même journée, si l'on veut que le patient reçoive tout le bénéfice de cette méthode."



FIGURE No 15

Sous l'influence du développement de la première molaire permanente, les deuxièmes molaires temporaires sont poussées en avant très rapidement lorsque le point de contact fait défaut entre la première et la seconde molaire temporaire.

516 av. Victoria,
S.-LAMBERT

Conditions d'admission des finissants du Mont-Saint-Louis à l'étude de la Chirurgie Dentaire

La question d'admission des Diplômés du Mont-Saint-Louis à l'étude de la

Chirurgie Dentaire est définitivement réglée, comme en fait foi le procès-verbal ci-dessous:

Extrait du procès-verbal de l'assemblée du Bureau provincial de Chirurgie dentaire tenue le vendredi, 26 octobre 1945, sous la présidence du docteur D. P. Mowry.

"Le docteur C. Archambault fait à l'assemblée le rapport suivant:

A la suite de sa dernière assemblée tenue, le 24 octobre 1945, à l'Hôtel Mont-Royal, à laquelle étaient présents les docteurs D. P. Mowry, G. Lord, C. A. E. McCabe, Denis Forest et moi-même, votre Comité "Mont-Saint-Louis" après une étude sérieuse de la question, soumet le rapport intérimaire suivant:

1.—Votre comité reconnaît que le Mont-Saint-Louis étant dûment affilié à l'Université McGill, quoique la majeure partie de ses élèves soit de langue française, doit nécessairement être considéré comme un Collège bilingue.

2.—Votre comité reconnaît qu'à l'exception de la langue latine, toutes les matières au programme du Mont-Saint-Louis sont équivalentes aux matières correspondantes du programme de l'examen prescrit par le Bureau pour l'obtention du certificat de compétence prévu par la Loi des Dentistes de Québec (brevet).

3.—Votre comité reconnaît que dans l'ensemble, le programme du Mont-Saint-Louis est de nature à donner une culture et une formation supérieures à celles exigées des candidats à l'examen prescrit par le Bureau.

4.—Votre comité, ayant été assuré par le Chanoine. Deniger de la Commission d'Immatriculation que la question du Mont-Saint-Louis est réglée quant à l'Université de Montréal et que l'Université de Montréal accordera le B.A. à tout gradué du Mont-Saint-Louis pourvu qu'il subisse, outre l'examen de philosophie du B.A., l'examen de latin de rhétorique et l'examen de grec—cette assertion sera confirmée par lettre, c'est pourquoi ce rapport est intérimaire et recommande au Bureau de demeurer dans le statu quo, les élèves du Mont-Saint-Louis ayant enfin accès au B.A., il n'y a plus lieu de considérer le cas.

5.—Votre comité recommande au Bureau d'écrire au Révérend Frère Merry Alphonse, Directeur du Collège du Mont-Saint-Louis, en ce sens et de le féliciter (a) de la formation et de la culture que son institution donne aux jeunes gens qui lui sont confiés, (b) d'avoir enfin solutionné avec les autorités de l'Université de Montréal le problème du B.A., (c) et d'avoir ainsi donné à ses élèves accès à toutes les professions.

6.—Votre comité recommande au Bureau de profiter de l'occasion et d'écrire aux autorités de l'Université de Montréal, pour féliciter la Commission d'Immatriculation d'avoir donné au Mont-Saint-Louis accès au B.A.

7.—Votre comité annexe à ce rapport la majeure partie de la documentation compilée qui nous a permis d'en venir à ces conclusions.

Le président,

(signé) CONRAD ARCHAMBAULT.

Il est alors proposé par le docteur V. H. Olivier, appuyé par le docteur C. A. Contant, et résolu à l'unanimité, que ce rapport soit adopté."

Mémorial du Docteur Théo. Coté

Le Comité de souscription pour le Mémorial du Docteur Théo. Coté reçoit, tous les jours, des témoignages de loyauté des anciens élèves envers celui qui a incarné, toute sa vie, le symbole du professeur savant et sympathique.

Un grand nombre de diplômés de la Faculté de Chirurgie Dentaire de l'Université de Montréal approuvent l'idée de perpétuer la mémoire du Docteur Coté, à l'Université, où il a donné, toute sa vie le meilleur de sa personne, à la formation professionnelle de générations de dentistes.

Une plaque de bronze, portant l'effigie du regretté professeur, sera apposée sur un des murs des salles de la Faculté, pour rappeler aux anciens élèves et aux classes d'élèves contemporains, l'image d'une vie entièrement consacrée à l'enseignement. En outre, une somme d'arg-

ent sera mise en fiducie et les intérêts annuels seront à la disposition de la Faculté de Chirurgie Dentaire, afin de constituer un prix perpétuel, décerné à l'élève finissant premier en "Couronnes et Ponts". De cette façon le souvenir du Docteur Coté vivra dans le bronze et au moyen d'un prix annuel, dont le capital ne sera jamais dépensé.

A date, le Comité accuse réception de la somme de \$679.00, dont \$500.00 ont été placés en fiducie pour rapporter environ 3% d'intérêts annuellement.

Le solde est gardé pour défrayer le coût de la plaque de cuivre, qui sera apposée à l'Université.

La campagne de souscription se continue.



DOCTEUR THEO. COTE

NOMBRE DES DENTISTES AU CANADA

au 1er janvier 1946

Province	Nombre de dentistes.	Pourcentage de dentistes dans la rapport à la population.	Nombre de dentistes dans la pratique civile.	Nombre de dentistes en service militaire.	Retraits de l'année 1945	Nouveaux dentistes en 1945	Dentistes qui ont changé de province
Ile du Prince-Edouard.....	28	1/3395	25	3			
Nouvelle-Ecosse.....	188	1/3074	143	45	5	5	
N.-Brunswick.....	105	1/4356	91	14	1	1	1
Québec.....	1014	1/3286	847	167	12	36	
Ontario.....	2107	1/1798	1621	486	43	66	3
Manitoba.....	234	1/3119	219	15	6	3	9
Saskatchewan.....	191	1/4691	167	24	2	1	3
Alberta.....	290	1/2745	214	76	6	9	3
Col. Britannique.....	408	1/2005	337	71	18	42	1
Total pour le Canada.....	4565	1/2121	3664	901	93	163	20

Mes Souvenirs

par EUDORE DUBEAU, B.S., D.D.S., L.C.D., Montréal

(suite et fin)

Vous savez tous que la patronne des dentistes est Sainte Apolline, appelée par les Américains qui la reconnaissent comme telle, "Saint Apollonia". Il existe aux Etats-Unis, chez les dentistes, une association dont le nom est "Guild of Saint Apollonia" et qui publie une revue dentaire. Il y avait à l'exposition rétrospective un département spécial pour exhiber les gravures ou images représentant Sainte Apolline, et vous serez surpris d'apprendre qu'il y en avait 700, toutes différentes. Le Dr Paul E. Poitras qui a bien examiné la collection, peut certifier la chose.

Il y avait aussi plusieurs autres dentistes de Montréal à cette célébration; je m'excuse de ne pas me rappeler leurs noms présentement.

FONDATION CARNEGIE

En 1920 le Dr Wm. J. Gies, l'éminent directeur de la Fondation Carnegie, à New York, avait proposé à l'American Association of Dental Teachers, de faire visiter les 52 Ecoles dentaires des Etats-Unis et du Canada, et cela aux frais de la Fondation Carnegie, par des professeurs des différentes Ecoles et choisis par elles, dans le but d'étudier les modes d'enseignement et d'en préparer un rapport.

La proposition fut acceptée; trois professeurs furent désignés pour chacune des Ecoles; deux des Etats-Unis et un de Toronto vinrent visiter la Faculté dentaire de l'Université de Montréal; pour la visite de l'Ecole dentaire de Toronto, je fus choisi, pour la bonne entente, avec deux professeurs des Etats-Unis.

Après les visites, il a fallu faire la compilation et une étude approfondie par des professeurs experts dans les différentes matières sous la direction de la Fondation Carnegie; ce fut un travail très long, très bien fait et il en résulta un rapport très détaillé de plusieurs cen-

taines de pages, intitulé "Carnegie's Report on Dental Curriculum", qui fut distribué à toutes les Ecoles dentaires du Canada et des Etats-Unis.

Ce travail a coûté à la Fondation Carnegie au-delà de cinquante mille dollars, et il a fait disparaître les Ecoles qui n'étaient pas affiliées à une université. La fondation a aussi fait des dons assez considérables en argent, à un bon nombre d'Ecoles dentaires, pour leur bibliothèque.

HYGIENE DENTAIRE

En 1906, lors du 2ème congrès des Médecins de langue française de l'Amérique du Nord, tenu à Québec, il y avait une Section d'Odontologie, à laquelle je présentai un travail intitulé "L'Hygiène dentaire dans les maisons d'éducation", dans lequel je préconisais la nomination de dentistes pour examiner les dents des enfants dans les écoles.

Un journal de Québec, maintenant disparu, me servit à cette occasion un plat magistral et bien assaisonné. Il écrivait entre autres choses que les dentistes n'avaient qu'un but en proposant ce plan, celui de faire de l'argent pour eux-mêmes et qu'avant longtemps ils demanderaient d'être nommés pour inspecter les cuisines des citoyens.

Nous constatons avec beaucoup de satisfaction que les choses ont bien changé depuis cette époque; en effet, l'hygiène dentaire progresse de plus en plus, et les pouvoirs publics en ont reconnu la nécessité urgente. La ville de Montréal a sept cliniques dentaires pour les enfants, où elle reçoit des milliers d'enfants chaque année, car les écoles des commissions scolaires de Montréal requièrent un certificat, attestant que les enfants ont leurs dents en bon état, ce qui: 1° les empêche de souffrir;

2° de s'absenter des classes; 3° leur assure pour l'avenir une bonne dentition.

Je désire prendre avantage de cette circonstance pour féliciter la "Société d'Hygiène dentaire de Montréal", qui remplit un rôle bienfaisant parmi notre population canadienne-française par ses congrès et sa publicité bien faite, dans les journaux et à la radio. Son énergique et dévoué président, le Dr Gabriel Lord, mérite une mention spéciale pour son travail inlassable.

PRIX A LA FACULTE DE CHIRURGIE DENTAIRE DE L'UNIVERSITE DE MONTREAL

Chaque année lors de la collation des grades à l'Université de Montréal, j'ai constaté avec plaisir que toutes les facultés et écoles ont des prix qui sont décernés comme récompenses à leurs élèves; à regret, cependant, j'ai constaté que les élèves de la Faculté de Chirurgie dentaire n'en recevaient pas, à l'exception de la médaille du Lieutenant-Gouverneur.

Il me fait plaisir de prendre occasion de cette réunion qui me met en contact avec vous, messieurs les élèves finissants de la dernière classe à qui j'ai enseigné, pour établir un prix. Je rencontrerai prochainement le Conseil de la Faculté pour leur offrir un don, afin que l'un de vous, de la promotion 1946, en soit le premier bénéficiaire. J'offrirai de donner à l'Université de Montréal une somme globale dont les intérêts garantiront ce prix annuel, sinon à perpétuité au moins jusqu'au centenaire de la Faculté de Chirurgie dentaire, en l'an 2004; et vu votre jeune âge la plupart d'entre vous

auront l'avantage d'assister à cette célébration et se rappeler la réunion de la "Conférence Bourdon", le 22 novembre 1945, au Cercle Universitaire de Montréal, dont j'ai été le fondateur en 1918.

Ce prix pourra être octroyé à celui qui aura obtenu la Médaille du Lieutenant-Gouverneur, ou à un autre élève, suivant le désir de la Faculté, pourvu que ce soit un finissant de la promotion.

Après le centenaire, la somme capitale qui aura garanti le Prix deviendra la propriété de l'Université, comme don.

Messieurs les finissants, je vous prie de croire que j'ai été très heureux de vous rencontrer une dernière fois, et je vous souhaite beaucoup de succès à vos examens et dans votre carrière professionnelle.

"Préparation des Tablettes de Penicilline"

par J. A. Nussle: American Journal
of Pharmacology août 1945.

Une base propre à la préparation de tablettes de pénicilline doit 10: se dissoudre lentement dans la salive, quand elle est tenue entre la langue et le palais; 20 être suffisamment fluide pour couler à une température entre 60° et 70° C.; 30: avoir un goût et une saveur agréable; 40: ne pas contenir d'ingrédient qui détériore la pénicilline.

Deux substances de base, qui répondent à ces qualifications, ont été trouvées. La première est à base de glycérine gélatinée; la seconde est une gelée d'agar, de sirop ordinaire et d'empoî de glycérine. La première se dissout en dix minutes et la deuxième en vingt minutes. Ces deux formes de tablettes gardent leur activité bactéricide durant deux ou trois semaines, à une température de 50° C.





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LES DENTISTES DE FRANCE

Le courrier nous apporte souvent des lettres de dentistes de France. Dans ces messages, ces confrères français sont friands de nouvelles, au sujet de notre vie professionnelle, des progrès réalisés en Amérique, au cours de la guerre, de dentistes canadiens-français qu'ils ont connus, ici, à notre Université ou ailleurs.

A lire ces demandes de renseignements, on comprend le besoin et l'angoisse de ces Européens, qui ont été isolés du monde extérieur durant cinq ans: on devine leur curiosité et leur désir d'apprendre chez eux, dont la plupart des Ecoles ont été inactives sous l'occupation et dont les conditions de travail n'ont pas été encourageantes depuis 1940; on se figure assez bien l'existence précaire de ces dentistes français au milieu des difficultés d'ordre psychologique et *matériel*, nées de la guerre et qui continuent après la fin des hostilités.

Ces dentistes regardent, et avec raison, l'Amérique et plus spécialement le Canada français comme un pays de Cocagne, où nos organisations professionnelles et nos centres scientifiques n'ont pas souffert du conflit mondial. Bien au contraire, à la faveur de la guerre, nos industries, nos populations, nos armées, tout notre pays a décuplé ses forces actives de production et notre profession dentaire, dans ses recherches et dans son rendement immédiat, a été entraînée dans cette suractivité fébrile et dans ce bourdonnement des esprits et des corps.

A l'ombre du danger, sous le coup des menaces ennemies, nos meilleurs cerveaux ont fouillé le champ des inventions et des découvertes. Tout l'arsenal scientifique s'est mis en branle dans le domaine industriel et dans le domaine médical. Le but immédiat de ces recherches a été la destruction

des agresseurs et la sauvegarde des nôtres. La profession dentaire a bénéficié grandement de ces travaux pour la réparation mécanique des dégâts des affections dentaires et pour la prévention et la lutte contre les agents infectieux.

Ce sont ces renseignements que nos confrères de France veulent recevoir. Et ils s'adressent à nous, parce que, nous seuls d'Amérique, avec les Haitiens, pouvons leur communiquer les données les plus au point et les plus récentes de la pratique de notre art, dans leur esprit et dans leur langue.

C'est un devoir pour nous, un devoir de charité chrétienne d'abord, d'aider ces confrères privés de nos facilités; c'est une obligation morale pour nous de les entourer de notre sympathie et de notre bon vouloir.

Nous les invitons à prendre chez nous ce qui leur a manqué depuis longtemps. Nous les encourageons à venir, si la chose leur est possible, à notre Université y faire un stage d'études pour se remettre à la page de la pratique dentaire.

G. DE M.



REMISE DE MEDAILLES AUX ANCIENS PRESIDENTS DE L'A.D.C.

Photographie prise lors de la remise de médailles à trois anciens présidents de l'Association Dentaire Canadienne, à l'Université de Montréal.

De gauche à droite: les docteurs Armand Fortier, représentant de la Province de Québec à l'A.D.C., A. L. Walsh, ancien président et récipiendaire d'une médaille, Harvey Reid, président de l'A.D.C., Endore Duveau, ancien président et récipiendaire d'une médaille, Don W. Gullett, secrétaire de l'A.D.C., Ken Carver, représentant de la Province de Québec à l'A.D.C.

Le docteur Joseph Nolin, ancien président de l'A.D.C. et récipiendaire d'une médaille n'apparaît pas sur la photographie.



Photograph by Dr. J. S. Bricker, Vancouver, B.C.

EMBLEMS OF THE CARIBOO COUNTRY

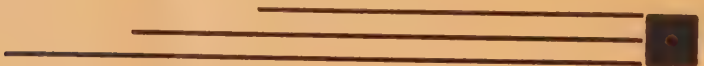
COUNSEL FOR HOLIDAYS

"Take a long walk
Read a good book
Make a new friend."



G. V. TARIO, D.D.S.
PEMBROKE, ONTARIO

President of the Ontario Dental Association
President of the Eastern Ontario Dental Association 1937.
President of the Renfrew County Dental Association, 1945
Member of the Board of Governors, Ontario Dental Association since 1939.



The Journal

OF THE CANADIAN DENTAL ASSOCIATION

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ADDRESS OF THE PRESIDENT

of the Canadian Dental Association*

by HARVEY W. REID, D.D.S., Toronto, Ontario

YOUR Board of Governors have met this past week in this city and have from Wednesday noon until Saturday at 6:00 o'clock strenuously applied themselves to the discharge of their duties to the Association. On your behalf I want to thank them, Chairmen of Committees and all others who attended the sessions and contributed to the success of the meeting. It is always a matter of regret to me that more members do not avail themselves of the privilege of sitting in on these sessions and learning of the work and scope of the problems of your National Association.

I should be grossly remiss if I did not report to you at least briefly the more important and significant decisions that were reached after the days and nights of deliberation.

Culminating a year of conscientious effort on the part of the officers, Board of Governors and Committees there were presented 39 reports. These were in turn studied by the different committees designated at the meeting and here follows a very few of the actions taken:

(1) Your Board of Governors after due consideration passed certain changes in the By-laws of the Association. These will later be presented and recommended for the approval and ratification of the Association at this meeting.

(2) Your "Military Committee" recommended that the name of this Committee be changed to "Dental Services Committee" for the following reasons:

- (a) The formation of a Permanent Dental Corps is now under advisement.
- (b) The Department of National Health and Welfare is about to institute a diagnostic dental service for civil servants. (Approximately 120,000).
- (c) The magnitude of the problem of supplying post-discharge dental treatment to discharged personnel under the Department of Veterans' Affairs.

The recommendation was approved and a strong committee appointed. A representative from each of the Federal Departments concerned will act as a liaison officer on the committee.

The careful deliberations of this committee may mean much to the people of Canada and the Profession of Dentistry.

(3) Journal: — Under trying conditions due to the short supply of paper, the Journal Committee, the Editor, Assistant Editors and staff have maintained the high standards of the Journal. It was recommended by the Board of

*Presented at Toronto, Ontario, May 27, 1946.

Governors that effort be directed as in the past to make the Journal the medium of expression of the best in Canadian Dentistry.

And now may I make some general observations concerning your Association. The work at C.D.A. Headquarters has increased tremendously. Last year over 100,000 pieces of mail passed through the office. That, in itself, is a tremendous task and is a fitting compliment to the efficiency of your Secretary. I doubt if the members at large appreciate the influence that is exerted on public opinion by that daily correspondence. To have a source of actual information concerning the profession and to have that source known to all and sundry, is of inestimable value. That there has been a decided lack of mis-information and inaccurate information concerning the profession appearing in the past year or so, is, I believe, in no small measure due to the work of your Association Headquarters.

The representatives of your Association have nothing but praise for the manner in which they have been received in Government circles. More and more have tasks been assigned to the Association due to the appreciation in Government circles that they can be better done by the Association than by the Government. Our worry, I believe, is not that we shall not receive co-operation but that the Association will be strong enough to carry out all the tasks that are really the responsibility of the Association.

Health Insurance remains a topic of keen interest and study. This whole problem is inseparably connected with the Dominion-Provincial Conference and the plan that may be suggested will, I believe, be influenced greatly by the results of the Conference. The British Health Act and the Wagner Bill in the United States are interesting to us,—the latter will likely be defeated, the former very probably enacted.

The supplying of post-discharge

dental treatment to discharged personnel has been an interesting education to government authorities in this country. Not too much credence was placed by some officials at least, in many of the principles laid down by this Association concerning Health Insurance. They know now that the submission of your Association was eminently sound. They know now that it costs terrific sums to organize and supply dental treatment on a wholesale scale; that Canadians are going to choose for themselves the individual dentist who will render dental service to them; that they insist on having that treatment supplied under the conditions to which they have been accustomed. The principles concerning Health Insurance as presented by the C.D.A. are just as true today as when they were submitted and the adherence to those principles is just as vital to the success of any Health Insurance Scheme.

Some months ago your Association became aware that an Order-in-Council was being prepared limiting the users of silver in Canada in 1946 to 70% of the amount used in 1945. This would have reduced the amount of amalgam alloy and gold alloys comprising silver to 70% of the amount available in 1945. This would have been a catastrophe in the present emergency. Your Association made representation to Ottawa and was successful in having all silver for dental use exempted from the terms of the Order-in-Council.

Since last June your Secretary and I have travelled from Coast to Coast. We have covered over 12,000 miles and spoken before 29 of the larger societies across the Dominion. We were the recipients of marvellous hospitality, honoured by large audiences and stimulated by the great enthusiasm shown for the work of the Association. One could not help but be impressed by the fine types of gentlemen we have in the profession across Canada. They are keen, enthusiastic

and intelligent and to me the future of our profession looms exceedingly bright. I want to express my deep appreciation for all the kindnesses shown me and to assure the many friends that I made on our trip, that I value highly those friendships and shall count them as the highlight of my year of office.

No report would be complete without acquainting you with the financial condition of your Association. Last year the expenditures exceeded the sum received from grants from the different provinces by about \$1,000.00. This year the activities of your Association will be and should be even greater. True, we have by careful pruning of expenditures over the past few years built up a small capital account. I consider it paltry for an organization, that is the front for the dentists of Canada. I do believe this, that organizations like individuals are to a large measure evaluated and can back up their demands in direct proportion to their Bradstreet rating. Your officers have been asked too often, "What is your Membership?" "What is the financial standing of your organization?" We have been told the former is excellent but the latter much to be desired. I am firmly convinced after meeting so many of the dentists of Canada this year that they want their organization on a really sound financial basis. To do that the grants from the provinces must be increased and you and I must pay more in our annual License Fee to cover it. Are we willing to do it? I have not the slightest doubt as to the answer of the dentists of Canada.

And now I have a very pleasant duty to perform. At the previous meeting of the Board of Governors instructions were given to procure Past-Presidents' badges. Due to strikes, etc., they were not available for our Western trip but were for the trip East. It has been my privilege

to present these badges to several of our Past-Presidents but we have with us at this meeting today Drs. Clay, Garvin, Pallen, Conboy and Cameron, and it is concerning them that I wish to speak now.

These are the men who had the vision, the tenacity and the ability to lay the foundations on which stands today, the Canadian Dental Association. It was their lot to labour when the financial contribution to the support of the Association was a mere pittance. They gave unstintingly, not only of their time, energy and ability but also of their personal wealth. Here, truly, are the founders of our Association—the organization that is the showcase—the front for the profession to which you and I are so proud to belong. We salute you, gentlemen and now through the vagaries of time it becomes my high privilege to ask our Secretary to pin on each of you men a past president's badge.

It is my hope that you will wear this badge with the pride with which the Association presents it to you—not, of course, for its intrinsic value but as a badge of service—a symbol of your efforts on behalf of the profession of Dentistry. You will not, I hope, consider that this is any license to rest on your well earned laurels, but rather, may I ask you to consider it as a marking of a milestone in your service. The Canadian Dental Association expects of you a continuance of your enthusiasm and energy and we hope, for many years to come, we may benefit by your experience and judgment. In the words of Robert Louis Stevenson, in his dedication of "The Merry Men" may I say to you, "to your name, if I wrote on brass, I could add nothing; it has been already written higher than I could dream to reach; and if I now dedicate to you this token it is not as a writer who brings you his work, but as a friend who would remind you of his affection."

LITHOGENESIS and HYPOVITAMINOSIS*

by W. J. McCORMICK M.D., Toronto, Ontario

IN EARLIER times, prior to 100 years ago, lithiasis, particularly of renal origin, was much more prevalent than today. It was in fact the major cause of surgical interference at that time. As evidence of the former medical prominence of this subject there are some eighty words with the prefix "lith" in medical dictionaries. During the last century, however, there has been in most countries a general decline in the incidence of urinary calculi, which has been noted clinically by some of our older urologists even in the span of their own experience. In America, where calculous disease has always been less prevalent than in Europe, the decline in incidence has been particularly noticeable.

The incidence of lithiasis is still known to be unusually high in certain countries, notably India and Egypt, which would seem to suggest a nutritional aetiology. Additional "stone areas" have been reported in southern China (Kwangsi Province), Indo China, Siam, Palestine, Dalmatia, Mesopotamia, and the valley of the Volga in Russia. Clinicians in these areas have attributed the high "stone" incidence to impoverished diets. Kwangsi Province is the poorest part of China. The diet there consists mostly of boiled rice (polished); whereas fruit, vegetables, milk and meat are only occasionally included. It is significant that most of these areas are districts where a form of civilization has existed since remotest historical time, and where antiquated sanitation, faulty personal hygiene and poor nutrition are still the rule. Recently, in a nutritional survey of Newfoundland¹, the prevalence of renal stone is referred to as possibly related to faulty diet. During the previous century urinary lithiasis was a disease of infants and young children mostly;

whereas now the generally lessened incidence involves mostly the older age groups. A possible explanation for these features of incidence will be offered later.

Joly² states "I believe the hypothesis that stone is a deficiency disease is the most plausible and probable that has yet been advanced. It explains not only all the principal features of the condition today, but also the changes in incidence during the past years. I believe that vitamin starvation acts primarily on the renal epithelium and through it on the colloidal mechanism of the urine; also that once this mechanism is deranged, stone formation must follow as a direct result of the laws of physical chemistry."

Aside from clinical observations, experimental work on laboratory animals suggests a relationship between urinary calculi and dietary deficiency. Osborne and Mendel³, in 1917, found that urinary calculi, both vesical and renal, could be produced in rats on a diet deficient in vitamin A. (It should be recognized, however, that vitamin A was the principal vitamin known at that time.) In 1926, Fujimaki⁴ found that rats on a vitamin-A-deficient diet developed phosphate stones in the urinary tract and cholesterol stones in the bile ducts. In 1931, McCarrison⁵ demonstrated the keratinizing effect of vitamin-A deficiency on the epithelium of the urinary tract. He believed that desquamation of this keratinized epithelium might provide the nuclei for calculi. He also found that if vitamin C were also removed from the diet renal calculi were more likely to be produced. Hughes⁶, however, in 1928, did not find calculi in hogs reared on a mixed diet lacking in vitamin A, although other symptoms of vitamin-A deficiency were present. Furthermore, Abderhalden⁷,

*Being Published Concurrently in Medical Record

in 1931, reports an unusually large number of urinary calculi in rats fed on milk and rice, a diet apparently not lacking in vitamin A. It has also been noted that calculi are found frequently in the urinary tracts of cattle and sheep feeding on alfalfa, grass and other green pasturage, which obviously would contain an ample supply of vitamin A.

Accordingly it would appear that the literature regarding experimental production of urinary calculi is still in a state of flux, and lacking conclusive evidence regarding the dietary factors responsible for the disease in man.

The immediate predisposing cause of urinary calculi is undoubtedly the presence of crystalline material in the urine. This usually consists of uric acid, calcium oxylate, carbonate and phosphate, the latter generally predominating. The crystalline concretions are laid down in an albuminous matrix around a nucleus of organic material such as blood clots or epithelial shreds. Once the nucleus is formed it is surrounded by muco-purulent albuminous material, which is stirred up by its presence; and thus conditions favourable to the deposition of new layers of stone are initiated.

Since the time of Pliny even to the present day, search has been made for something, which, taken orally, might be capable of dissolving urinary calculi or preventing their formation. Pliny's remedy was ashes of snail shells. The most serious efforts of modern times in this direction were those of Roberts⁸ and Garrod⁹ of England, the former using long courses of potassium citrate or bicarbonate, and the latter employing the same salts of lithium in smaller doses. Keyes¹⁰ reports favourable litholytic effects from the habitual use of apple cider.

DISSOLUTION AND PREVENTION OF RENAL CALCULI

In my own clinical experience I believe I have discovered the secret of

the beneficial effect of apple cider in the dissolution and prevention of renal calculi—its content of vitamin C (ascorbic acid). In many of my cases I have observed that a cloudy urine, heavy with phosphates and epithelium, is generally associated with a low vitamin-C status, as determined by titration with dichlorophenol-indophenol (Hoffmann-La Roche); and that as soon as corrective administration of the vitamin effects a normal ascorbic-acid level the crystalline and organic sediment disappears like magic from the urine. I have found that this change can usually be brought about in a matter of hours by large doses of the vitamin—500 to 2000 mg.—oral or parenteral. Subsequently maintenance doses of 100 to 300 mg., daily, are usually sufficient to keep the urine free from these deposits. It would thus appear that deficiency of vitamin C, which is the predominating dietary defect in the various "stone areas", may provide the determining factor in urinary lithogenesis.

The exact nature of the biochemical mechanism involved in this rapid physiochemical transformation of the renal excretion is not yet determined. It is most likely to be caused by metabolic changes effected catalytically by the vitamin, since it is inconceivable that such small amounts of ascorbic acid eliminated in the urine, usually about 1 mg. per ounce, could affect dissolution of the crystalline sediment by any resultant change in the pH status of the urine. To check this possibility vitamin C was added *in vitro* to phosphatic urine in quantity much larger than the amount found normally present under optimal intake, but with no apparent dissolution of the calcareous precipitate.

As further evidence that this associated biochemical change is metabolic or systemic and not merely local in the urinary tract I have made the further observation that calcareous incrustation at the inner canthus of the eye and on the cornea, and salivary

or dental calculi (deposit of tartar on the teeth or dentures) are also associated with C-hypovitaminosis. The ocular calcareous deposits I find may be cleared away in a few days by correction of vitamin-C status, and I find also that dental calculus, which lays the foundation for so much dental havoc, can be quickly suppressed and prevented by an adequate intake of vitamin C.

My attention was first called to the possibility of this correlation by frequent spontaneous reports from my patients to the effect that since adopting the regimen which I frequently prescribe to correct basic nutritional deficiency they have noticed that their teeth or dentures feel much smoother to their tongue and that their dentists had noted a marked reduction in dental tartar. Other cases had reported an unusual clarity of the urine following adoption of the regimen. In another instance a nurse in charge of a rest home where one of my patients was in residence noted an unusual freedom from calcareous deposits on the urinary utensils used by this patient, in contrast with the heavy deposits on the urinary vessels used by the other inmates. The dietary regimen referred to above included all the vitamin-B-complex factors as well as a liberal intake of vitamin C. By trial and error and process of elimination I finally found that the vitamin-C component of the regimen was the major factor in bringing about not only freedom from dental deposits of salivary calculus, but complete and prompt elimination of precipitates of calcium phosphates from the urine. I found also that continued use of a liberal vitamin-C intake resulted in rapid clearing of epithelium and other organic detritus from the urine, and in the mouth a marked reduction in gingival erosions and epithelial desquamation. I have now observed these effects in so many cases that the correlation between C-hypovitaminosis and lithogenesis in general seems indubitable. Desquamated epithelium and amorphous or crystalline phos-

phates are so frequently observed in the urine of apparently healthy subjects, and dental deposits of salivary calculi are so widespread that we have been inclined to regard these conditions as normal. And this opens up the wider concept that calculi found in many other parts of the body, as in the biliary tract (gall stones), the pancreas, the tonsillar crypts, the appendix vermiformis, the conjunctiva (in the ducts of the Meibomian glands), the nasal tract (rhinoliths), the mammary glands, the uterus, the ovaries, the testicles, the prostatic gland, the blood (haemoliths), the gastro-intestinal tract (gastroliths and enteroliths), and even the calcareous deposits in arteriosclerosis and in arthritic and gouty tophi, may all have a similar nutritional-deficiency background. In other words, we may now have the basic aetiological solution of the so-called "diathetic lithiasis", which was formerly thought to be constitutionally hereditary.

C-HYPOVITAMINOSIS

There are two ways in which C-hypovitaminosis may predispose to lithogenesis aside from the metabolic disturbance as manifested in the increased deposition of calcium phosphate in the various body fluids. In the first place a lack of vitamin C definitely tends to fragility of the perivascular, submucous and subcutaneous connective tissues as a result of the liquefaction of the collagenous intercellular cement substance. This condition is manifested clinically by easy bruising of the tissues generally, due to rupture of the small blood vessels. In the mouth the gums become tender and very subject to haemorrhagic abrasions in brushing the teeth or by friction of dentures. Desquamation of the buccal mucosa becomes accentuated. This material, augmented by food remnants, forms a necrotic detritus, which when deposited in the interdental spaces provides an excellent nidus for ubiquitous micro-organisms, pyogenic and mycelial. This conglomerate supplies the matrix or nucleus for the

deposition of calcareous material (tar-tar), which, in turn, sets up inflammatory changes in the gingival tissues, these having lost their natural resistance to infectious invasion by reason of the c-hypovitaminotic breakdown in the connective supporting tissue. Thus a vicious circle is established, accentuating calculus formation and gingivitis, and leading to pyorrhea and serious destructive periodontal lesions.

In the genito-urinary tract the same fragility of tissues, consequent to c-hypovitaminosis, is manifested by increased desquamation of epithelium and vulnerability of the mucosa. The resulting detritus provides the nuclei for lithogenesis, renal and vesical. The superimposed mechanical irritation by the calculi predisposes to infectious invasion by otherwise innocuous organisms such as the ubiquitous staphylococcus, streptococcus and colon bacilli. The resultant inflammatory exudate and the swing of the urinary pH to the alkaline side favour further lithogenesis, and thus again the vicious circle is brought into action.

In further confirmation of the hypothesis of C-hypovitaminosis as the basic aetiological factor in lithogenesis the following clinical data seem pertinent: Agnew¹¹, reporting on the dental condition of the Tibetans and people of the west China border, states that heavy deposits of salivary calculi, sometimes sufficient to mask the dental formation, are very common. He further states that the diet of these people is very deficient in vitamin C, consisting mostly of butter, tea and barley flour or rice. Very scant supplies of fresh fruits are available, and then only seasonally. Arkle^{12, 13}, reporting on dental conditions of the Indians of James Bay and Labrador, in north-eastern Canada, states that very few mouths were without calculus formation. Even the very young children were affected. The diet of these tribes consisted mostly of white-flour biscuits, oatmeal, lard, fish, wild

game, tea and sugar. Their supply of fresh fruits and vegetables was limited to seasonal berries, sprouting buds and moss, the latter being obtained from the stomachs of caribou and other wild animals. Such a diet would be obviously deficient in vitamin C. MacGregor and Simpson¹⁴ have observed that children with celiac disease, on special diet of high protein and low fat content with little or no fresh fruit or vegetables, showed rapid dental calculus formation. The diet in these cases was predominantly deficient in vitamin C. Adamson et al¹, in a recent survey of nutritional conditions in Newfoundland, report the concurrent widespread prevalence of urinary calculi and periodontal disease; while Goodwin¹⁵ reports heavy deposits of dental calculi as a prominent feature of periodontal disease in Newfoundland. According to this survey deficiency of vitamin C is the major nutritional defect in Newfoundland. James¹⁶ reports an incidence of almost 100% of cholecystitis and a correspondingly high incidence of cholelithiasis among the Tibetans and Szechwanese. The diet of these people consists mostly of butter, tea, barley flour and rice with little or no fresh fruits or vegetables,—obviously very deficient in vitamin C. The high fat content of this diet, the butter being used in large quantity, probably contributes to the predominance of biliary calculi; while the increased acidity of the urine, due to increased absorption of fatty acids, may prevent an otherwise high incidence of urinary calculi. As stated by Agnew, these people are very subject to heavy formation of dental calculus. In South China, where rice is the staple diet and butter less in use, the incidence of both urinary and dental calculus is very high. Shaw et al¹⁷, in a recent report on "acute and chronic ascorbic-acid deficiency in the Rhesus monkey", note the early appearance of a "white sticky residue" on the teeth, which progressed to heavy deposits of dental tartar.

On the basis of the hypothesis of vitamin-C deficiency as the major aetiological factor in lithogenesis, the marked reduction in the incidence of urinary calculi in the last century, and the shift in age incidence from infancy and childhood to the older age groups, could be explained by the more widespread distribution and increased supply of citrus and other fruits, and by the advances in modern pediatric nutrition whereby citrus and other fruit juices rich in vitamin C are included in the diet of early infancy. This dietary revolution has not been adopted so freely by the older age groups.

SUMMARY

Clinical observations and laboratory experimentation by the author on the effect of administration of vitamin C in altering the physio-chemical properties of the urine and other body fluids, principally in eliminating deposition of phosphates, has led to the hypothesis of C-hypovitaminosis as the basic aetiological factor in lithogenesis in general,—urinary, salivary, biliary, etc. A correlated study of the literature regarding the history of calculous disease and the changed trends in nutrition, particularly in the matter of vitamin-C intake, lends support to this hypothesis.

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16 Gothic Avenue

In the long run our national economic welfare depends on the volume of production of valuable goods and services. The more we produce the more we shall have to divide among ourselves, and the larger the share of each can be. So far we have done a deplorably poor job of production since peace returned. We ought to be having a business boom, but ever since last summer we have been impairing the possibility of having one. We are trying to have a low-production prosperity, and it can't be done.

—Cleveland Trust Co. Business Bulletin.

That physician will hardly be thought very careful of the health of others who neglects his own.—Rabelais.

SOME TECHNICAL PROCEDURES IN THE USE OF DENTAL ALLOYS

by T. C. TRIGGER, D.D.S., St. Thomas, Ontario*

THIS subject is not being presented with the expectation of advancing something new, but with the desire to describe some phases of technical procedures in restoring lost tooth structure by means of amalgam fillings in order to accomplish the best results.

One prominent operator declared that in his opinion the amalgam filling has a limited use in the mouth, and that its proper manipulation is so difficult that it is extremely uncertain under the most favourable circumstances; and he says "After a most careful series of experiments and observations, extending over a period of thirty years, my opinion is that amalgam cannot be relied upon either to maintain an approximal contact or occlusal carving." It is a well known fact that such fillings show decided defects at the proximogingival margin as well as along other margins. In many instances this is due no doubt to poor condensation during the insertion of the filling, especially at the proximogingival margin. Here, also is frequently noticed a decided protrusion due to some change in the mass of the filling or in many instances, caused by faulty carving, thus leaving an overhanging edge of material; this may occur because the marginal edge is hidden from view.

These protrusions invariably set up much irritation to the soft tissues. In my practice I have found it necessary at intervals, to trim and polish all plastic fillings, and usually the patient remarks that the fillings are much improved in appearance and also the teeth feel more comfortable.

This procedure will allow the operator to check for any filling defects.

As the ideal filling has never been found, dentists are obliged to use the different preparations now in vogue and should not be confined to any one in preference. Since the introduction of alloys, unnumbered teeth have been saved. Is that not satisfactory proof of the value of amalgam?

In preparing cavities to receive any restoration, there is certainly a limited area of tooth structure upon which to operate. The object in referring to this subject is to point out the importance of proper preparation of the cavity extension in molar and bicuspid teeth when making replacements, and to indicate the relative positions of the cornua to the pulp chamber, so as to prevent any disturbance to the vitality of the pulp. (Fig. 1, Fig. 2).

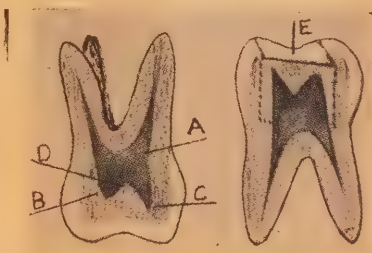


FIG. 1

FIG. 2

FIG. 1. Shows section view of the mesial surface of an upper left molar. A. Pulp chamber "cava pulpum"; B. Mesio-lingual cornu; C. Mesio-buccal cornu; D. Dentine Summit, "acra dentum".

FIG. 2. Shows a sectional view of the mesial surface of an upper left molar with the outline of the cavity and its relative position to the pulp chamber.

*Dr. Trigger has been on the Ontario Register for over fifty years. His first registration certificate was in 1892.—Editor.

In cutting with a bur in the direction of the summit of dentine, it should be borne in mind that in removing this portion of dentine very keen cutting burs should be used so as not to cause any more pain than possible, as it resists the bur as does some sections of enamel.

To remove the decay from, say a mesioclusal cavity, in an upper left molar, chisel away the overhanging cavoenamel margin so that easy access may be had to the cavity. Then care should be taken to gradually remove the decay and all underlying defective dentine. But the operator should always keep in view the relation of the walls to the cornua extensions, for in many cases, the vitality of the pulp may be endangered, by too close approach to these parts, especially the buccal cornu of the pulp, as it invariably lies nearer to the occlusal surface of the tooth than the lingual one. (Fig. 3, Fig. 4).



FIG. 3



FIG. 4

FIG. 3. View of the mesial surface of a lower left molar, showing the position of the cavity walls to the pulp cavity.

FIG. 4. Shows sectional view of a lower first bicuspid tooth. Note the limited area of extension of the cavity walls approximating the pulp chamber.

It will be observed in cutting away the lateral walls and floor of the cavity that only a limited amount of tooth tissue can be removed, as for example, in a mesioclusal cavity of an upper first molar. The floor of the cavity should be cut flat and its extension should be cut only two mil-

limeters in the distal direction, and the buccal and lingual walls should be cut three millimeters distally at the widest contour of the tooth which is near the occlusal surface.

In making these extensions of the floor and walls of the cavity suitable burs and stones should be used. The burs should have keen cutting edges so as to cause the least amount of pain. A smooth cutting instrument is a solace to the operator and comfort to the patient. In making grooves and undercuts for the security of the filling, care should be taken not to injure the underlying tooth tissue or to weaken the adjacent enamel structure in order to prevent any tooth fracture, thus weakening the future security of the restoration.

In making any dovetail extension on the occlusal surface of molars and bicusps in order to obtain retention of the filling, it is advisable to drill very carefully over the area of the dentine summit "acra dentum" as in many cases, in young patients, this nerve tissue is highly organized. It would be far better to select a non-conductive and less irritating filling than alloy even though it be a temporary one, until such time as the tissues will tolerate a more permanent material.

The use of gutta percha is an excellent stopping in such cases. It is surprising how comfortable and also serviceable these fillings are when properly manipulated and inserted and what wonderful results are obtained in the use of this material in protecting the vitality of the pulp. Sometimes palliative treatment is necessary to overcome this hypersensitive condition. One efficient remedy is a mixture of equal parts by weight of sulphuric ether and crystals of chlorotone.

THE PROPER RESTORATION OF THE PROXIMAL AND OCCLUSAL SURFACES OF MOLARS AND BICUSPIDS

In order to prevent failures in the preparation of cavities in this loca-

tion, it is advisable to make a flat gingival seat to allow a proper rest for the filling. We have often observed failures in proximal fillings, due in many cases to the filling being placed upon an oval gingival seat, and the cavity not being extended deep enough to allow of sufficient anchorage to sustain the heavy stress of mastication, thus causing an unequalized pressure and stretching of the filling from the cavity walls, and eventually allowing recurrence of decay. The gingival seat should not only be cut flat but extended sufficiently buccolingually to distribute occlusal pressure, and axially to allow a moderate depth of the gingival seat. Another factor in the cause of failure of these operations is the improper preparation of marginal edges of the cavity in order to obtain cleanliness and to prevent food particles accumulating in these areas. Care must be taken where fillings are placed in proximal surfaces of molars and bicuspid to extend the lateral cavity margins beyond the line of decay, otherwise there will be recurrence of decay about the margins. (Fig. 5, Fig. 6).



FIG. 5

Proximoclusal fillings, one in the first molar and the other in the second bicuspid. Note improper restoration of mesial and distal marginal ridges of these fillings, allowing an abnormal interproximal space to exist, and also the lack of occlusal carving.

The correct anatomical restoration of the occlusal surface of fillings is very important and the operator should always keep in mind the amount of pressure in the act of biting which varies in different indi-



FIG. 6

Proximoclusal fillings in a molar and bicuspid where the cavity margins have been extended sufficiently so that the fillings will be self cleansing and where normal interproximal space and contact points have been provided. Note the extension of cavities made for anchorage of the fillings.

iduals. Another point of failure in the preparation of cavities in this class of fillings is in not obtaining sufficient anchorage. The lateral walls should be extended into strong tooth tissue and formed at right angles or nearly so to the gingival step, thus increasing the internal support of the filling.

The proper finishing of the marginal edges, the proper carving of the occlusal surface and the exact reproduction of the anatomy of the tooth is most important.

Possibly there is no more common failure in constructing amalgam fillings, than lack of proper protection of the gum septum caused by faulty contour and incorrect contact points.

In preparation of a medium setting alloy for amalgamation a fairly good sized mortar and pestle should be used, and the alloy and mercury should be thoroughly ground into a workable homogeneous texture then divided into pellets. Each pellet should be first placed on the floor of the cavity and burnished into place by using suitable round pointed plastic instruments and the process continued until the cavity is filled to proper proximal and occlusal contacts. (Fig. 7) In using a medium setting amalgam the operator has plenty of time to make artistic restorations and contours. However with this al-



FIG. 7. Shows some practical forms of amalgam filling instruments, with smooth points for burnishing slow setting amalgam.

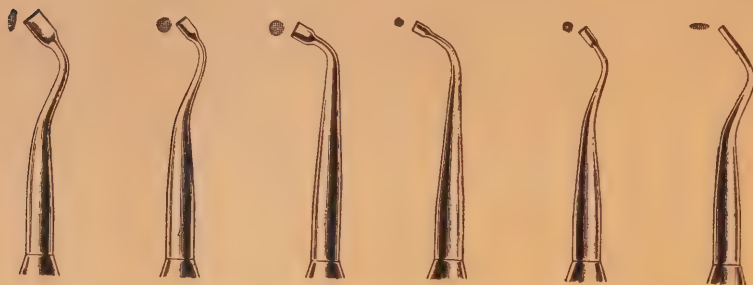


FIG. 8. Shows amalgam instruments with serrated points for compacting and tamping fast setting amalgam in the process of filling.

loy it is well to advise the patient that care should be taken not to bite too soon on the filling until it becomes fully set.

The composition of quick setting amalgams differs from those already described as the basic elements have a greater per cent of silver and thus require more mercury for their amalgamation. In commencing the filling of the cavity the first piece should be quite plastic and packed against the floor of the cavity with special serrated plastic instruments. (Fig. 8). As each layer is compacted and tamped against each other, the surplus mercury should be wiped away from time to time as the filling proceeds. The filling, contouring and finishing should be done as quickly as possible before the amalgam sets. No one filling material can be used

in every type of case. The selection of material should be made according to the requirements of the case. It is true that the durability of any filling depends much upon the proper preparation of the cavity to receive that restoration.

Moreover, we are cognizant of the fact that amalgams are valuable materials to restore lost tooth tissue although a number of substitutes have been introduced to take their place, such as the gold inlay, fusible alloy inlay filling materials and the use of plastics for the construction of inlays and jacket crowns, etc.

At times it has been observed that with old and large amalgam fillings there has developed some irritation and discomfort to the patient which condition is definitely improved by replacing with inlay substitutes. It

is good practice to obtain a thorough survey of the teeth and supporting structures by means of roentgenograms. These will show pulp encroachment on restorations, defec-

tive and overhanging interproximal restorations, which cause an inflammatory condition of the gum tissue. Every precaution should be taken to avoid any post-operative sensitivity.

ANNOUNCEMENTS

Northern Ontario Dental Association

The annual convention of this Association will be held in the MacIntyre Club, Schumacher, Ontario, August 31.

Eastern Ontario Dental Association

The annual convention of this Association will be held in the Chateau Laurier, Ottawa, September 23-24.

Convention of New Brunswick Dental Association

The 51st Annual Convention of the New Brunswick Dental Society will be held at the Admiral Beatty Hotel, Saint John, N.B., September 16 and 17—Dr. S. K. Wetmore, Sec., 147 Germain St., Saint John, N.B.

Montreal Dental Club Clinic

Preparations for the 22nd Annual Fall Clinic to be held under the auspices of the Montreal Dental Club on Oct. 23-25, at the Mount Royal Hotel, are nearing completion. The program will consist of limited attendance clinics, a progressive clinic, essays, table clinics etc. The progressive clinic will be on Oral Surgery, conducted by Dr. S. P. Mallett of Boston. Among those presenting limited attendance clinics will be Dr. LeRoy Ennis, Dr. M. M. DeVan, both of Philadelphia, Dr. Harold Levine of New York and Dr. J. C. Flanagan of Montreal. The complete list of clinicians and their subjects will be published in next month's journal. Preliminary programs will be available about Sept. 1. A program will be sent upon request.

It is recommended that you make immediate hotel reservations and it is suggested that you do not place emphasis on attending the Fall Clinic in making such reservations. The following hotels, all within ten minutes walk of the Mount Royal, are listed for your convenience: Windsor, Ritz-Carlton, Queens, LaSalle, Berkeley and Ford.

M. L. DONIGAN, Director
1414 Drummond St.

The best portion of a man's life is his little nameless, unremembered acts of kindness.

—William Wadsworth.

The Forum

DIAGNOSIS OF DENTAL MALOCCLUSIONS

by B. G. DeVRIES, D.D.S., Minneapolis

Summary of Paper in Jour. of A.D.A., May 1, 1946

1. The chronologic age of a patient alone does not determine whether or not a dental malocclusion should be treated. Never tell a patient to wait to have a malocclusion treated until he is 12 or 15 or 9 years old or any other age. It is far better to record the condition, analyze it on a physiologic basis and render a proper professional opinion.

2. The retention of deciduous teeth beyond the average time for their loss should be evaluated not only on the basis of the chronologic age of the patient but also on the basis of his general development.

3. Asymmetry in the loss of the deciduous teeth should be critically observed.

4. Diseased and infected deciduous

teeth should never be allowed to remain in the mouth on the pretext of thereby avoiding probable dental malocclusion.

5. Complete dental x-ray examination is indicated for all juvenile patients where the responsibility for the dental development of the child rests upon the dentist.

6. The dentist should be careful never to give casual or offhand advice to parents concerning the dental health of their children.

7. The fine concept of the norm in dental development, which every dentist possesses, should be the yardstick with which to measure the dental condition of all of his juvenile patients. Use it!

SURGICAL CLEANLINESS IN THE TIME OF GEORGE IV

Sir Astley Cooper had to cut a wen from George IV's scalp. The next day he was summoned to the Palace and Sir Astley noticed that the King viewed him with considerable disfavour. This puzzled him and he asked his nephew if there could be anything wrong with his appearance. "Why," said his nephew, "I should have put on a white cravat and a clean shirt, or at least have washed my hands before I waited on His Majesty." Sir Astley's shirt and hands were bespattered with blood. "God bless me! So I ought," he replied; "but I was not aware of it—and the King, sir, is so very particular". Before an operation the surgeon would

turn up his sleeves to save the coat, and would not trouble to wash his hands, knowing they would get stained. The area of the operation would sometimes be washed with soap and water. The silk or thread used for ligatures was hung over the button of the surgeon's coat and during the operation the knife was often put between the surgeon's lips as a convenient resting place. The instruments used for dressing wounds or lancing abscesses were kept in the vest pocket and often only wiped on a towel or a piece of rag as the surgeon or dresser moved from patient to patient.—*British Dental Journal*.



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CHANGE IN DENTAL PRACTICE

by DON W. GULLETT, D.D.S., Toronto, Ontario

All things are subject to change. Nothing is permanent. The very fact that the rate of change in some things is slow serves to formulate certain gauges for others which are rapid. The one is known as stable whereas the other we term process or transitory.

No one thing could remain absolutely stationary or the harmony of the universe would be thrown out. No lane can be so long that it has not a turning, no evil can last forever and while that which is good is also subject to change it is well that time dims the memory of the lost loved one. To measure the tempo of change, to judge the relationship of movement of one thing to another is of prime importance.

Unquestionably some men recognize change farther ahead than others. These men are the leaders in all walks of life. Often times such individuals are of annoyance, for a tendency exists, often to the majority, at all times to avoid the adoption of the new for the old. Many may delay the adoption of new concepts through obstructive procedures, however permanent obstruction is impossible. The real task of human endeavour is to recognize change, discourage that which is bad and encourage that which is good. Indeed it may be found that that which is considered evil now may be proven good at a later date. Truly great men are always ready to give up any hypothesis, however much beloved, as soon as facts are shown to be opposed to it.

The practice of dentistry is changing rapidly. If it did not do so, dentistry would eventually cease to be a member of the scientific family.

The rapid development of the social services during recent years has forced the necessity for speed in changes. The development of technical auxiliary services in dentistry has been phenomenal. It is doubtful if any isolated vocation has grown more rapidly during recent years. Further developments are being promulgated which will further change the practice of dentistry. Undoubtedly many ill-conceived proposals will be made in future just as has occurred in the past. However, organized dentistry cannot afford to adopt a negative attitude towards necessary changes.

Primarily the dental schools must make certain that their curricula are in keeping with the demands of the age. Dental practice must be such as will meet the challenge of the social changes which are upon us. The C. D. A. has several committees working upon these problems in an endeavour to achieve positive policies. The Council on Dental Education, committees on Health Insurance, Auxiliary Services, Industrial Dentistry and Specialists & Specialization are all studying the relationship of dental practice to present day social conditions.

NEWSPAPER EDITOR ATTACKS THE DENTAL PROFESSION

An ex-sailor wrote what is described as a "timely" letter to the Vancouver Sun complaining apparently about not having his mouth rehabilitated as promised by the Dominion Government and the result was an editorial in that paper on June 14 which for misunderstanding, for the emphasis on half truths or no truths at all, for the desire to create disapprobation of a noble profession in the minds of the public stands out as a fine example of just how warped an editorial can be when the editor decides to fight the cause of a disgruntled sailor without making a thorough investigation of all the facts in the case.

The Sun editorial is entitled "Broken Dental Promise" and reads as follows:

"An ex-sailor has written a timely letter of complaint to the Sun. He is one of about 850,000 servicemen and women entitled to be made dentally fit on their return to civilian life. They were promised this service in the name of the Dominion of Canada and at the expense of the government. A great many of them are not getting it.

"Some dentists don't wish to have anything to do with a veteran because of a snobbish idea that, out of uniform, he may lower the tone of the clientele. Other dentists manage to overcome their aversion if the veteran pays them a bonus above the scale of fees allowed by the Department of Veterans' Affairs.

"This gouging should not be tolerated. The scale was set after conferences with the Canadian Dental Association. If it isn't high enough, the D.V.A. should raise it. Under no circumstances should the veteran be gypped out of his rehabilitation rights.

"Yet the editor of the Journal of the Canadian Dental Association defends the bonus system in his publication for May. 'This is already being done in some quarters,' he states, 'to what extent I do not know, but it is not supposed to be done and some change of orders might well be made.'"

"Most people who regard an unmet promise as an unpaid debt will be more sympathetic with the attitude of Dr. L. G. Robinson, New Westminster, who contributes an article to the Journal on this very subject. He thinks the system is "incredible" because most dentists were building up a lucrative practice in the years when fighting men were risking their lives.

"Their jobs were done," he says, "at a rate of pay that was somewhat inadequate, too — a bit more inadequate than the scale of fees laid down (by) the Department."

"As a matter of fact," Dr. Robinson remarks, "also from the material point of view, doesn't each one of us who remained at home owe these individuals more than he could ever repay if he worked for them for years without any fees at all?"

"This is a matter which the dental profession should settle, either within its own ranks, or by arrangement with the D.V.A. Not all of its members have a conscience as acute as Dr. Robinson's."

The letter to the Editor of the Vancouver Sun in reply to his editorial appears in this issue of the Journal, which letter called forth another Sun editorial on July 4 entitled "We Do Not Retract" in which the editor reaffirms his belief that dentists from coast to coast should work for the same fee, whether he practices in some large city or in some small town; whether his office is fitted with the latest equipment or with furniture fifty years old; to say nothing of variation in ability and achievement and that any other plan for the care of veterans amounts to "professional abuse." He also endeavours to further prove his point re the snobbishness in our profession.

Any further correspondence with the "Sun" is probably a waste of time but the profession should be informed as to the nature of this controversy.

To infer that the veteran is being "gypped out of his rehabilitation rights" by the dental profession is not just a distortion of facts, it is a plain untruth. The dentists of Canada are doing their utmost to care for these veterans and in most cases at the fees already agreed upon but to reach this objective in a reasonable time is practically impossible with the dental personnel available. To accomplish as much as possible in as short a time as possible, as efficiently as possible, certain ideals have been set forth in the pages of this Journal. These ideals have been taken by the editor of the Vancouver Sun and so twisted and corrupted as to make a monstrosity out of our whole program.

No, the members of the dental profession are not trying to evade the responsibility of caring for veterans: neither have they any "aversion" to working for veterans so they have no "aversion" to overcome in suggesting that a dentist be allowed to charge the veteran the difference between his regular fee and the DVA fee. Most dentists, considering Canada as a whole, find the DVA fee reasonably satisfactory although there are some glaring defects in the fee schedule.

The following are a few illustrations of the variations between the Canadian and U.S.A. Veterans' Fee Schedules:

BASIC FEE SCHEDULE

Department of Veterans' Affairs in Canada and the United States

	Canada	U.S.A.
	(Effective May 25, 1946)	
Examination and execution of Government forms	\$ 0.00	\$ 4.00
Radiograms (single)	1.00	2.00
Prophylaxis	2.00	4.00
Vincent's, first treatment,	2.00	5.00
Emergency Treatment	1.00	2.00
Extractions	first tooth 2.00	each 3.00
	additional teeth 1.00	each
<i>Amalgam fillings:</i> one-tooth surface	2.00	3.00
two-tooth surface	3.00	5.00
three or more surfaces	4.00	8.00
<i>Gold Inlays:</i> one surface	6.00	8.00
two surfaces	9.00	14.00
Silicates	3.00	4.00
Dentures (acrylic)	40.00	50.00
Repair acrylic denture	4.00	6.00

The reader can draw his own conclusion in perusing these two fee schedules but I would like to refer to but one of the variations and that is the first one. A veteran presents himself for treatment with an examination form say six months old. In the first place as has been so often stated, one dentist cannot make a satisfactory diagnosis for another dentist. In the second place, mouth conditions have changed in six months' time so the dentist has to re-examine the mouth, compare his examination with the unnecessary complicated D.V.A. form, write to D.V.A. headquarters for approval of the changes made, then when the work is completed, fill out three government forms which are again complicated and which take considerable time to fill out and for all of this service the Canadian dentist receives \$0.00. However, our dentists are overlooking this glaring defect in the fee schedule and are doing their very best to serve the veteran.

With regard to dentists of special ability charging the veteran an extra fee I would like to point out that there is nothing to prevent a veteran going to another dentist and having all his work done at government expense if the dentist to whom he has been referred or the dentist he has at first chosen feels that he is entitled to an additional fee. Men are not equal. Dentists are not equal, even newspaper editors are not equal, and some veterans would prefer to go to a man of outstanding ability for his work even if he paid the whole fee and forgot about the government service. I submit that in such cases the veteran would be much better served if permitted to apply the government fee to his dental account rather than insist upon him paying the whole account himself. The veteran is entitled

to this consideration. Furthermore, we would again point out that the ex-service dentist is also a veteran and is entitled to as much consideration as other veterans.

In the Report of the Inter-Departmental Committee presented by the Minister of Health and the Secretary of State for Scotland to the British Parliament in May, the following statement appears:

"We are satisfied that there is a far greater diversity of ability and effort among general practitioners than admits of remuneration by some single scale applicable to all. If the recruitment and status of the profession are to be maintained, men must be able to feel that more than ordinary ability and effort receive adequate reward. On the other hand, a reward which would be appropriate when these exist would be extravagant when they do not. In consequence, we are clear that any satisfactory system of remuneration must involve differentiation dependent on ability and effort."

The truth of the above findings must be apparent to anyone who is willing to consider the matter. We are not asking that the DVA schedule of fees in general be raised for that would possibly create the very condition suggested in the above report: namely, that such an increase would be "extravagant" for the work done by the less competent operator. As stated before the fee schedule could be greatly improved which would be to the advantage of all but this has no bearing on the criticism advanced by the editor of the Vancouver Sun. The Sun editor stresses the point that "an unmet promise is an unpaid debt." He implies and rightly so that "A contract is a contract," "A covenant is a covenant," "An agreement is an agreement" and such should be lived up to by the dental profession but he fails entirely to realize that a few representatives of the Canadian Dental Association have no authority to enter into a binding contract with the government or anyone else which will compel any dentist to work for anyone at a specified fee or work for a veteran at all for that matter. A dentist may have to work for a veteran at the established fee if he works for him at all, granting that the government is expected to pay the fee, but under conditions which are developing he may not work for him at all if equity is lost sight of in the whole picture which cannot, by any stretch of the imagination, be in the interests of the veteran.

I would like to point out that the veteran is given so much money for clothes. Say he buys a suit and an overcoat and has \$7.00 left for shoes. He can purchase shoes for \$7.00 but he desires a special make of shoe worth \$12.00 so he pays the difference and no one considers that the shoe merchant is "gypping" the veteran.

Had this newspaper editorial been written in the spirit of cooperation, with any desire to offer a solution of a most difficult problem, it might have served a good purpose, particularly for the veteran. But written as it was, it could do nothing but arouse bitterness and dissension.

We would express the hope that the Editor of the Vancouver Sun as well as any other interested newspaper editors, will in future try to co-operate in helping the dental profession to solve the very difficult problem of rehabilitating the mouths of our veterans. In this way the veteran will be helped. Any other procedure will work to the detriment of the veteran.

M. H. G.

CORRESPONDENCE

Dental Service for Veterans

The following letter was sent to the Editor of the Vancouver Sun on June 28 and was published, only in part, on July 4. For the information of the profession the whole letter is given herewith. The italicized sections were omitted by the editor in publishing the letter.

To the Editor of the "Vancouver Sun":

It is always a matter of amazement to me how a newspaper editor, such as yourself, can sit down and write such an editorial as appeared in your paper on June 14 under the title "Broken Dental Promise". Admittedly, the dental profession is facing some very difficult problems at the present time but such unfortunate editorials as yours do not help any to arrive at a solution of these problems. *No doubt your own profession has problems occasionally so one would expect some better appreciation of the problems of another profession.*

In the first place you state that about 850,000 servicemen and women are entitled to be made dentally fit on their return to civilian life, and that a great many of them are not getting it. The inference of course is that 850,000 require dental attention which is not true to fact. *Were it true it would require the full time of every dentist in Canada for nearly a year to complete this work and the civilian population would receive no attention at all.* However a very large number do require dental attention and as the ex-sailor, I presume, stated, it is disappointing at least not to be able to obtain that service in a reasonable time. *Whether you consider the average man who has made every contribution he could to the war effort, not being eligible for active participation in the war, is entitled to dental service at the present time may be debatable in your mind but surely his wife and children are entitled to a little service and surely the wives and children of men who have been in*

active service are entitled to some consideration. I am sure the veteran thinks so. To state that the dental profession is "gypping the veteran out of his rehabilitation rights" is an unfair, is an untrue, is an unsportsmanlike statement for you or any other Canadian editor to make and should be publicly retracted.

You further state that some dentists do not wish to have anything to do with a veteran because of a "snobbish idea that, out of uniform he may lower the tone of the clientele" which inference is about as far from the truth as any statement could well be. *In our office we have served a great many veterans and have never seen even one that could for a moment be placed in the category pictured in your statement.* Dr. Robinson did refer to this matter in his paper written for dentists and not for the public and certainly not for newspaper editors to peruse with the idea of undertaking something to defame a profession which is sitting up nights wondering how to accomplish the herculean task of caring for the mouths of a multitude of ex-service personnel. The condition Dr. Robinson refers to no doubt does exist in isolated spots in Canada and he offered a very sensible solution which was certainly in the interests of the veteran and until you are prepared to offer a better suggestion, why throw stones at his plan?

You also state that dentists are "gouging" the veteran in asking a bonus above the scale of fees allowed by the Department of Veterans' Affairs, another defaming statement. True the scale of fees was agreed upon between representatives of the Government and of the Canadian Dental Association some time ago but because it was agreed upon does not mean that in all respects it is satisfactory. It is not. In some ways it is ridiculous but having the same changed is easier said than done. Furthermore, why should a man who has outstanding

ability, who has studied much and worked hard and has become particularly efficient be asked to work for a standard national salary?

It is absolutely impossible to set a schedule of fees which is satisfactory for all men in all localities and under all conditions. Would you approve of setting a standard and equal salary for all newspaper editors in Canada regardless of ability? The answer is obvious.

Your use of the quotation from Dr. Robinson's paper as to the debt owed by the dentists who remained at home to the veteran seems to me to also be an effort to place dentistry under a cloud. I would point out that a large percentage of dentists gave up established practices to enter the armed services and now that these men have returned to civilian practice they are entitled to every reasonable consideration. Remember that they are veterans also. It cannot

be expected that these men be asked to work without adequate reward. Nor is it practical to have one set of fees for those who served overseas and another set for those who served at home.

All in all your editorial is most unfortunate. It castigates the dental profession upon grounds that are most unfair and shows a complete lack of understanding of our whole problem. *The press exercises great power and influence admittedly but when that power is used to drag down into the dust a noble profession which is doing its utmost to meet a very difficult situation instead of trying to cooperate in solving that problem by giving the public some true information about the whole matter, then journalism as applied to our newspapers is degrading itself.*

M. H. GARVIN

CANADIAN DENTAL ASSOCIATION NEWS

President's Visits

Our President will attend the following meetings:

July 4-5 — Nova Scotia Dental Association

July 15 — Prince Edward Island Dental Association

Sept. 16-17 — New Brunswick Dental Association

Oct. 23-25 — Montreal Fall Clinic.

Estimates-Department of National Health and Welfare

In the estimates brought down in the House of Commons, \$56,785.00 is set aside for the newly created Dental Health Division.

Ontario Raises C.D.A. Grant for 1946

At the Annual Meeting of the Ontario Board held last week action was taken to increase the *per caput* grant to the Canadian Dental Association from \$4.00 to \$5.00 to be effective at once. The Ontario grant for 1945 was \$8000.00 based on 2000 members—the grant submitted for this year is \$10,165 based on a membership of 2033. This voluntary action, not waiting for concerted action by the other provinces, is most encouraging to the officials of the Association. It is stated that this action comes from a realization of the value of the work the C.D.A. is doing. In

submitting the grant the Ontario Board takes the stand that not only is it the desire that the current work be adequately supported but in addition the need is felt for the creation of a capital account for the Association many times the present paltry amount in order to give national dentistry standing amongst other kindred organizations and also to gain proper respect from the public at large.

We congratulate Ontario for this commendable action and appreciate the fact that it is done on proven value of C.D.A. activities.

In addition the Ontario Board has given direction to seek amendment to the Act to be able to increase the amount of the annual fee so as to be in a position to take care of future financial responsibilities.

June 24, 1946.

D. W. GULLETT

Amendments to Dental Acts

Certain amendments have been made to the Quebec and British Columbia Dental Acts which follow.

It will be observed under the Quebec amendments that:

- (1) Control is established for a minimum of hygiene in dental offices.
- (2) Power is given to organize a body of auxiliary hygienists.
- (3) According to the act in the past, only male applicants from outside the province

could be granted a licence, now both sexes are made equal.

- (4) Certain self-explanatory changes which are easily understood by the wording of the amendment respecting discipline.

Under the amendments for British Columbia particular attention is directed to Section 11 which reads in part as follows:

"The following persons shall, subject to the provisions of this Act, upon passing the examination prescribed by the Council for persons applying for registration as members of the College, and upon payment of all examination and registration fees, be registered as members of the College and receive a certificate of registration, that is to say, any person:—

- "(a) Who is a graduate in dentistry of a university in Canada or of a university approved by the Council in the British Commonwealth of Nations outside of Canada or in the United States of America; or
- "(b) Who has, for a period of ten years, practised dentistry or dental surgery in any Province of Canada in conformity with the law of that Province and in respect of whom the Council, in its discretion, waives further educational qualifications.

"Provided that a person qualified under clause (a) shall not be registered unless he has, at the time of his application for registration, academic training equivalent to two years in the faculty of arts and science of the University of British Columbia."

Saskatchewan Health Services

An estimated \$5,895,141 will be spent by the Saskatchewan government in public health services in 1946-47. This is the largest appropriation for this purpose to be made in the history of the province.

In the report, the sum of \$8,000 was earmarked for the establishment of a dental administrative office in Regina.

Clipping From Canada Gazette—June 29, 1946

College of Dental Surgeons of British Columbia

Notice is hereby given that the representatives of the College of Dental Surgeons of British Columbia on the Dominion Dental

Council of Canada were withdrawn on the 21st day of June 1946.

Dated at Vancouver, British Columbia, this 22nd day of June, 1946. W. J. LEA,

Registrar, College of Dental
Surgeons of British Columbia

Post-Graduate Course in Advanced Orthodontics

The Faculty of Dentistry, University of Toronto, has made arrangements with Robert H. W. Strang, M.D., D.D.S., of Bridgeport, Connecticut, to conduct a two-weeks' post-graduate course in advanced Orthodontics, January 27 to February 8, 1947.

Dr. Strang will have associated with him as instructors Glen H. Whitson, D.D.S., New York, and W. H. Thompson, D.D.S., Pittsburgh. These men are well qualified as teachers, and have conducted similar courses at Columbia University for the past ten years. They will present, in theory and practice, the principles and method of treatment of malocclusion, as advocated by Dr. Charles H. Tweed, and exemplified in the Edgewise Arch Mechanism. This is the first time that this course has been offered outside the United States, and the Faculty is fortunate in securing the services of these outstanding teachers.

This is an intensive theoretical and practical course for orthodontists who desire a special training in the technic of assembling and manipulating the Edgewise Arch Mechanism.

The course will consist of:

- A. Twenty-five hours of lectures covering the following subjects:—
 1. The natural forces of the denture and their bearing upon the evolvment of normal occlusion and malocclusion of the teeth.
 2. The classification of malocclusion of the teeth and its application to treatment.
 3. Etiology of malocclusion.
 4. Growth and development of the denture.
 5. Case analysis.
 6. The evolution and mechanics of the Edgewise Arch Mechanism.
 7. An analysis of the technic associated with the manipulation of this mechanism.
 8. The Tweed principles of treatment of malocclusion.
- B. Twenty hours devoted to quizzes and conferences.
- C. Fifty hours of technical instruction in the assembling and manipulation of the mechanism.

An opportunity is now being given Canadian Orthodontists to enrol in this course. The number of applicants to be accepted is limited to twenty-five, and the fee for the course is \$125.00.

Those wishing to take advantage of this course should make application immediately, to

The Dean, Faculty of Dentistry, 230 College St., Toronto, 2B, Ontario.

Those whose applications are accepted will be furnished with a list of the required instruments, and particulars of the prescribed reading schedule, so that they may come prepared to derive the maximum benefit from the instruction given.

NEWS FROM THE PROVINCES

QUEBEC

Graduates of the University of Montreal for 1946

June:—Forty-four senior students received their D.D.S. degree from the Faculty of Dentistry, University of Montreal.

Most of these graduates will commence practising in the Provinces of Quebec, Ontario and New Brunswick. About five or six of them will take up graduate studies at the University of Montreal and at dental schools of the United States.

Elections at the Société Dentaire de Montréal

June 11:—The following Executive Board was elected by the members for 1946,47: President, Dr. Jacques Demers; Vice-President, Dr. Raoul Lussier; Secretary, Dr. Victorien Dubé; Ass't-Secretary, Guy Langelier; Treasurer, Dr. Louis Lépine; Councillors, Drs. Alphonse Plessie-Bélair, Gaston Lajoie, Euclide Malo, Gabriel Lord; Adviser, Dr. Amherst Hébert.

ALBERTA

Lethbridge Dental Society

June 5:—Dr. H. R. MacLean of Edmonton, Professor of Operative Dentistry at the University of Alberta spoke on "A Standardized Technique for Gold Inlays".

Representatives were present from Medicine Hat to Blairmore to Cardston.

SASKATCHEWAN

Saskatoon Dental Society

June:—The following officers were elected: President, Dr. E. S. Shapera; Vice-President, Dr. N. F. Gropper; Secretary-Treasurer, Dr. S. H. Locke.

Dr. D. I. Neuman, the retiring president, gave a brief résumé of the past year's activities.

ONTARIO

Admission to Degrees Doctor of Dental Surgery University of Toronto

With Honours

Elino Carl Aho, Ross Edgar Breen, Robert Anderson Clappison, George Franklyn Russell Cole, Peter Frederick Foote, David Charles Way, Newton Earnest Wickham.

John Ernest Ackerman, Arthur John Joseph Breglia, Lorne Bruce Brunton, Murray Wilfrid Buchman, Russell Douglas Coleman, Donald Robert Copeland, Jack Logie Craig, Margaret Mary Currie, George Alexander Drennan, Roderick Charles Freyman, Jack Charles Friedman, Percy Goldberg, John Vance Hart, Ray Stephenson James, James Duncan Jenkins, Albert Rudolph Kaukinen, Douglas Gordon Langmaid, Irwin Lichtman, Norman Bennett Lightford, Wilfred John McColeman, William Cedric McComb, Terrence Joseph McDonough, William Patrick Joseph McManus, Charles Malkin, John Edmund Francis Malo, Victor Vernon Marnell, Robert William Marshall, William Kenneth Martin, William Joshua Metcalfe, Frederick Mitchell, Peter Morkis, Charles Bruce Morrow, Yaroslav Paul Ochitwa, Walter Micheal Olynyk, Henry Albert Patzalek, Ross Freeman Richardson, Joseph Crawford Rife, Alexander Rotman, Wilfred Joel Rovansky, Norman Lloyd Sandomirsky, Alvin Jack Shinoff, Howard Purdy Stockton, Howard Purdy Tytaneck, Theodosy Harry Wachna, John Frederick Blair Wolfe, Alan Lloyd Younger.

Bachelor of Science in Dentistry

Samuel Lee Honey, D.D.S., Russell James Settree Tickle, D.D.S.

Diploma in Dental Public Health

Harry Knowlton Brown, D.D.S., Samuel Lee Honey, D.D.S., Frank Albert Kohli, D.D.S., Hugh Richard McLaren, D.D.S.

Diploma in Dental Oral Surgery and Anaesthesia

Allan Gardiner, D.D.S., Alan Edward Hobden, D.D.S., David Henry MacDonald, D.D.S.

Diploma in Orthodontics

Edward Earl Johns, D.D.S.

AWARDS

The Albert E. Webster Memorial Scholarship—R. E. Breen, by reversion to R. A. Clappison; The W. George Switzer Memorial Award—R. A. Clappison; The Harold Keith

Box Gold Medal—A. J. Shinoff; The Harold Keith Box Silver Medal—A. L. Younger; The Wallace Secombe Memorial Scholarship—E. C. Aho, D. C. Way, R. E. Breen, ranked in order named, by reversion to V. V. Marnell; The Academy of Dentistry Prize—E. C. Aho; The Dental Students' Parliament Prize—W. P. J. McManus; The Wallace Secombe General Proficiency Prize—R. A. Clappison; The First Oral Health Thesis Prize—R. A. Clappison and A. L. Younger (aeq.); The Second Oral Health Thesis Prize—G. F. R. Cole and N. E. Wickham (aeq.); The First Henry Thompson Scholarship—R. E. Breen; The Second Henry Thompson Scholarship—D. C. Way; Students' Administrative Council Gold Key—D. G. Langmaid, R. W. Marshall.

Grey-Bruce-Dufferin Dental Association

June Meeting:—45 members were at the Owen Sound Golf and Country Club for a golf tournament and a cruise on the bay.

Dr. M. A. Chandler of Toronto won the low gross with 80. Dr. McDonald of Toronto won the low net with 72.

During the banquet Drs. R. J. Godfrey, J. Johnston and Roy Ellis of the Faculty of Dentistry, University of Toronto spoke; also Dr. Frank Martin representing the Ontario Dental Association. Dr. G. D. Morris of Owen Sound entertained with some sleight-of-hand tricks.

The following officers were elected: President, Dr. Harry Zinn of Shelburne; Vice-President, Dr. G. H. McKee of Owen Sound; Secretary, Dr. D. A. Cheetham of Owen

Sound; Executive Directors, Dr. Clifford Sudden of Dundalk, Dr. Borden Grant of Durham, Dr. Weiler of Mildmay, Dr. Blackwell of Kincardine and Dr. E. L. Hardman of Wiarton.

Ottawa Dental Society

The officers of this association for the year 1946-47 are as follows:—

Past President—Dr. Harold E. Armstrong

President—Dr. Paul Côté

Vice-President—Dr. E. S. McCartney

Secretary-Treasurer—Dr. G. W. Barrett

Committee—Drs. G. O. Hutchison, P. L.

Nesbitt, Aimé Couture, J. W. M. Lawrence, L. E. McLachlan, A. C. Stinson, F. L. Thompson and Carl Laurin.

EMPIRE NEWS**GREAT BRITAIN****Woman Dentist Heads B.D.A.**

On July 2 Dr. Lillian Lindsay, Britain's first woman dentist became first woman president of the British Dental Association. In her inaugural address she made a strong plea for better dental care for British children.

AUSTRALIA**Children's Dentistry**

The Australian Dental Association states that there are 982,123 children aged from two to ten years inclusive in Australia, and it may

be fairly assumed 860,000 are in need of dental treatment. The average number of fillings required is ten. The colossal figure of 8,500,000 fillings at least is required for this age group. Without subsequent regular treatment the recurrence of dental caries would be overwhelming.

For this reason the Association recommended that any national service should start with a small age group, two to four years inclusive, when the incidence is much lower, and another age group should be added each year until all children of school age are included.

In the two to four years group there are

345,150 children. Allowing for 15 per cent receiving treatment, approximately 300,000 children require initial treatment. This number represents the concentrated attention of 600 dentists for one year, for the inception of such a plan.

The Association asserted that there is no possibility of combating or overtaking the widespread disease of every dentally crippled adult, however tempting it might be to contemplate such a prospect theoretically.

The population of Australia was 7,229,864 on June 30, 1943, and it has been estimated that approximately 25 per cent of this number have been seeking dental treatment with any regularity.

Recent registration reveals that the total number of dental surgeons in the Services and in civil practice is 3,330, including some who have retired or who are partly incapacitated. On present information the ratio of dentists to population is 1:2171.

A calculation made from the volume of work carried out in the Children's Clinic at the Sydney Dental Hospital indicated that it would take 2,000 dentists at least one year to render the 860,000 children in the age group from two to ten years dentally fit.

—*D. Jour. of Australia*

INDIA

All India Dental Association

The outstanding event of the year was the holding of the first All India Dental Conference in New Delhi on January 11-13, 1946. The Hon. Sardar Sir Joginder Singh, Minister of Health for India, opened the Conference and inaugurated the All India Dental Association. This is the first organized dental association representing the various provincial dental organizations. Dr. R. Ahmed was elected the first President and Dr. N. N. Bery, Hon. General Secretary.

The Indian Dental Journal was made the official organ of the Association. At present, the All-India Dental Association has branches in every province in India and local branches in most important towns.

The Post War reconstruction plans of the Government of India have just been published. The Bhore Committee, as it is generally called, has recommended that in the immediate post war period that three new dental colleges be started, in Lucknow, Patna and Madras, in addition to the three old ones at

Calcutta, Bombay and Lahore, which must be enlarged and brought up to date. The Committee has recommended that all dental colleges must be associated with medical institutions and be affiliated with the local or provincial university. According to the Committee, there is only one qualified dentist to 300,000 of the population. In order to have 1 dentist to 4,000, it will take about 70 years, if all the six dental colleges are running and about 100 dental graduates are turned out each year from each college. The Committee has also recommended that in every dental college provision be made to train 100 dental hygienists every year in order that they may, under the supervision of the dental surgeon, take care of the public dental service for the mass of the people. In the first five year period, all the effort is to be concentrated in the training of the necessary dental health personnel and in the second five year period, public dental health service is to be inaugurated so as to reach the mass of the people. It is envisaged that, if the program is worked out according to plan at the end of the first ten years, a beginning will have been made to bring medical and dental relief to some units of India's 400 million. The problem is stupendous and one that staggers the imagination in view of the dental backwardness of the country at present.

At the present time with the exception of Bengal, there is no Dental Act, in any other province in India. Even the Bengal law is ineffective due to the fact that there is no compulsory registration and no bar to practice by unregistered men. No dental progress in India is possible unless there is an All-India Dental Act enforcing compulsory registration and bar to practice by unqualified persons. Therefore, the All-India Dental Association has taken up the matter with the Government of India. It is surmised that the Government may be influenced to pass such legislation during this year. Without this legal background no dental progress in India is possible. It is a great pity that even after 200 years of enlightened administration there are only three full fledged dental colleges in India and the Indian cities and towns are full of quacks and charlatans, who do great damage to the people and are a menace to public health. We have hopes that with the establishment of a National Government in India, things will take a turn for the better especially in the dental field.

GENERAL NEWS

Educational Measurements

Appointment of Dr. Shailer A. Peterson, former assistant professor of education at the University of Chicago, as director of educational measurements to supervise aptitude testing of all beginning dental students has been announced by the Council on Dental Education of the American Dental Association.

All dental schools in the nation have agreed to cooperate in the new testing program to be inaugurated with the opening of the 1946-47 freshmen classes next fall. The tests will not be employed immediately as a condition of admission but will be used to gather data over a five-year period for a revision of entrance requirements for dental students.

The tests will measure each student's ability in understanding scientific literature, in visualizing patterns, in written and oral expressions, and in the use of his hands and fingers skillfully and dexterously. —A.D.A. Release

Senate Approves A.D.A. Bill For Dental Research Institute

The U.S.A. Senate on June 14 passed and sent to the House of Representatives a bill calling for establishment of a \$2,000,000 National Institute of Dental Research.

Post Graduate Courses at University of Pennsylvania

A tentative program has been published announcing post-graduate courses for the year 1946-47. The following subjects are being covered: Anaesthesia, Dental and Oral Surgery; Ceramics; Complete Dentures; Endodontics; Fixed Bridge Work; Oral Diagnosis and Roentgenology; Partial Dentures, Periodontics.

The fee for most of these courses is \$150.00.

It is also planned to offer courses of from one or two weeks' duration in Dentistry for Children, Public Health and Inlays.

For further information address the Dean, School of Dentistry, University of Pennsylvania, 4001 Spruce Street, Philadelphia 4, Pennsylvania.

Animated Cartoon Illustrates Need for Regular Dental Care

The Tennessee Department of Public Health has announced completion of a technicolour animated cartoon aimed at motivating children to seek regular dental care.

Termed a new departure in dental health education, the film, "Winky, the Watchman," is directed at the 8-year age level, but employs techniques to appeal to all ages.

IN MEMORIAM

Philip Alexander Jackson, of Winnipeg, Manitoba, aged 59, died July 14. He was born in Port-a-down, Ireland, and came to Canada 40 years ago.

He was a Past Grand Master of Capitol Lodge, A.F. and A.M., and a past president of the Dickens' Fellowship.

At the time of his death he and his son Dr. W. Ivan Jackson were associated in practice.

Dr. Jackson is survived by his widow, three sons, two daughters, two brothers and two sisters.

Thomas Robert Paterson, of Almonte, Ontario, aged 78, died on June 23. He was graduated from the School of Dentistry of the Royal College of Dental Surgeons in 1898 and practised his profession in Almonte since that time.

He was a member of Almonte Board of Education from 1907 to 1922, a member of Town Council in 1924, and a member of the Sons of Scotland; the C.O.C.F.; and the S.O.O.F.; and had an ardent interest in skating, curling and bowling.

Dr. Patterson is survived by his widow and two sons.

George Fulton Roulston, of Exeter, Ontario, aged 63, died June 22. He was graduated from the Royal College of Dental Surgeons of Ontario in 1906.

He was a member of the official board of James Street United Church and was also active in the Masons, Oddfellows, and Lions, and was a member of the Exeter Bowling Club.

Dr. Roulston is survived by his widow, one son, and two grandchildren.

LE DIAGNOSTIC PRECOCE DES CANCERS DE LA CAVITE BUCCALE. (1)

par GERMAIN PINSONNEAULT, M.D., Montréal

Le rôle du dentiste dans le dépistage du cancer de la bouche est immense. Et si l'on songe, par ailleurs, que le cancer de la bouche, en y incluant celui de la lèvre, est le plus fréquent des cancers de l'homme, on se rendra compte de la tâche que la chirurgie dentaire est appelée à jouer dans la lutte anticancéreuse.

Les femmes sont relativement à l'abri du cancer de la bouche. Et, chose remarquable, quand elles en sont atteintes, leurs tumeurs, à formule cytologique égale, sont beaucoup moins malignes, beaucoup moins métastasantes, d'évolution beaucoup plus longue que celle de l'homme. Le fait qu'aujourd'hui, un grand nombre de femmes ont pris l'habitude de fumer, n'a rien changé à cet état de chose. Ce qui est une preuve de plus contre le mythe du tabac, dans la genèse des cancers de la bouche. Tous les facteurs d'irritation, en général, peuvent précipiter l'évolution d'un cancer; ils peuvent même engendrer des modifications structurales des téguments, qui feront le lit de la maladie, chez un individu prédisposé, mais il faut retenir que l'irritation ne peut, dans aucun cas, devenir, par elle-même, une cause déterminante de néoplasme.

La localisation des différents cancers de la bouche, par ordre de fréquence, se classe comme suit: la lèvre, la langue, les

gencives, l'amygdale, le plancher buccal, la joue, le palais, le pharynx buccal. Dans l'ordre de la gravité, suivant la localisation, on trouverait, par voie de décroissance, le palais, le pharynx buccal, l'amygdale, la langue, la joue, la gencive et la lèvre.

Ce qui fait la gravité d'un cancer de la bouche, c'est son aptitude à métastaser dans les ganglions du cou. On peut à peu près tout, contre la lésion buccale primitive, alors qu'on ne peut à peu près rien, contre les ganglions cervicaux. Les lésions primitives des épithéliomas de la bouche jouissent en général, quelle que soit leur formule histologique, d'une radiosensibilité remarquable. On voit d'énormes cancers de la langue ou de la lèvre, qui fondent sous le radium, comme du beurre au soleil. Or, quand les cellules soeurs de ces épithéliomas de la lèvre ou de la langue, se développeront dans les ganglions du cou, elles seront devenues à peu près totalement radio-résistantes. Il est inutile pour le moment de se demander le pourquoi de cette anomalie: nous n'en savons rien. Il faut en accepter le fait, et en conclure que le secret de la radiosensibilité d'une tumeur n'est jamais contenu uniquement dans sa description cytologique. On oublie trop que la gravité d'un cancer de la bouche, comme de tous les cancers en général, est avant tout une affaire de

(1) Extrait d'un travail présenté aux "Journées Médicales" de la Société Médicale de Montréal, le 8 mai 1946.

données anatomiques et *cliniques*. Exemple: Un épithélioma d'un centimètre cube, situé sur le voile du palais, a 75 chances sur cent d'avoir envahi les lymphatiques, alors qu'un épithélioma de volume et de formule cytologique identiques, situé sur la gencive a 75 chances sur cent d'avoir laissé les lymphatiques indemmes.

Conclusion: il faut déceler et diagnostiquer *cliniquement* les cancers de la bouche avant leur stade d'invasion des lymphatiques. Comment y parvenir? Ce n'est pas, bien sûr, en escomptant de se trouver en présence des formes végétante, rongante, ou térébrante, qu'on décrit dans tous les manuels classiques. A ce stade là, le malade est déjà, dans cinquante pour cent des cas, un incurable. S'il vient vous consulter à ce degré d'évolution de la maladie, c'est qu'il est déjà partiellement au courant de la nature de son mal, et que, dans son for intérieur, il vient chercher auprès de vous, non pas la confirmation, mais bien plutôt l'infirmité d'un diagnostic qu'il a déjà posé lui même. Mais alors, direz-vous, à quoi ressemble un épithélioma buccal au début? Je crois qu'on peut en distinguer deux formes, une forme nodulaire et une forme en nappe.

(A) *La forme nodulaire* aboutira à ce que seront plus tard les formes rongeantes et térébrantes classiques. C'est la plus maligne. Mais c'est aussi en revanche la plus fréquente et la plus facile à identifier cliniquement. Elle se présente comme une masse indurée, en forme de pastille ou de papule, fermement enchassée dans la sous-muqueuse, comme le chancre syphilitique. La muqueuse au niveau de la surface libre de la masse peut présenter quatre aspects différents.

1) Elle peut être *infiltrée* et chagrinée, un peu comme dans le phénomène de la peau d'orange du cancer du sein. Ce caractère permet de distinguer l'épithélioma au début, du kyste glandulaire, où la muqueuse sus-jacente garde son aspect normal.

2) Elle peut être *érodée*, comme dans certains chancres syphilitiques.

3) Elle peut être *ulcérée*, comme dans les gommages de toute nature, à la phase finale de leur évolution.

4) Enfin, elle peut être simplement *crevassée*. Et on se trouve alors en présence d'une forme clinique de cancer buccal connue et décrite par plusieurs auteurs sous le nom de "cancer fissuraire". On ne saurait trop souligner l'importance du cancer fissuraire, parce qu'il est une cause fréquente d'erreurs de diagnostic.

(B) La deuxième forme clinique de l'épithélioma buccal à ses débuts, *la forme en nappe*, se développe sur des dystrophies préexistantes de la muqueuse, qu'on a qualifiées à juste titre de pré-cancéreuses. La première de ces dystrophies est très commune; c'est la leucoplasie. Vous connaissez, tous, ces plaques blanchâtres, bleutées ou nacrées, plus ou moins opaques, qu'on trouve assez souvent dans la bouche de certains patients plutôt âgés, le plus souvent des gros fumeurs, d'anciens syphilitiques ou des porteurs de racines ou de dents cariées. La leucoplasie simple est caractérisée par un effacement des papilles de la muqueuse, laquelle se recouvre d'un enduit blanchâtre, lisse et chagriné, et plus ou moins transparent. Fréquemment, la leucoplasie se complique. Alors elle s'épaissit, se cornifie, se fendille, se crevasse, s'ulcère et se cancérisse. Toute leucoplasie simple doit être étroitement surveillée, et toute leucoplasie compliquée doit d'emblée être traitée comme du cancer.

La deuxième forme de dystrophie de la muqueuse buccale susceptible de faire le lit du cancer est l'érythroplasie. Elle est relativement rare, et d'étiologie inconnue, comme la leucoplasie. Elle est caractérisée par un placard rouge vif, d'aspect brillant, bien circonscrit, qu'on rencontre le plus souvent sur les piliers du voile du palais, l'amygdale, la joue, ou la langue. J'ai remarqué, et je serais heureux de voir mon opinion infirmée ou confirmée, que les épithéliomas développés sur des plaques d'érythroplasie sont particulièrement malins et réfractaires aux radiations. J'en arrive maintenant

à la partie la plus importante de cet exposé. Qu'est-ce que doit faire et ne pas faire le dentiste en présence d'un malade, qu'il soupçonne d'être atteint d'un cancer buccal.

1) Il doit d'abord ne pas se contenter de lui regarder la bouche. Le diagnostic des épithéliomas intracavitaires se fait avant tout par le toucher. Tous les perfectionnements modernes de l'endoscopie n'ont rien changé et ne changeront rien à cette vérité. Le doigt pénètre facilement dans des replis et des recoins que la vision n'atteint que difficilement. J'ai vu de savants confrères se livrer durant une demi-heure à des exercices d'acrobatie, pour repérer un épithélioma de la paroi antérieure du pharynx, que le doigt pouvait identifier en quinze secondes. L'épithélioma des muqueuses, à quelque stade qu'il soit, donne une sensation tactile, qui ne trompe pas souvent. Et je suis persuadé que bien des cancers buccaux au début sont méconnus, parce qu'on néglige ce mode primitif et fondamental d'exploration.

2) La lésion étant repérée et identifiée comme une lésion suspecte, le dentiste

doit se mettre en contact avec un cancérologue pour décider ensemble de la conduite à tenir. *Il y a toujours des conséquences graves à installer un appareil de prothèse, qui entrera en contact avec une lésion cancéreuse ou même seulement précancéreuse. Il y a également des conséquences graves à faire l'avulsion d'une dent en contact avec une tumeur, quand la cure radicale de la tumeur ne suit pas immédiatement l'avulsion de la dent.* Les méthodes de traitement des tumeurs de la cavité buccale sont par ordre d'importance, l'irradiation, l'électrocoagulation et l'exérèse chirurgicale. Le choix de la méthode appropriée dépend de la nature de la tumeur, de son siège et de son extension. Même dans le cas d'une tumeur apparemment bénigne, je crois que le chirurgien-dentiste a intérêt à consulter un physiothérapeute. La pire erreur en tous cas, pour le dentiste comme pour le médecin, serait de contribuer directement ou indirectement, à faire différer le traitement d'une lésion facilement curable, et de s'exposer à une métastase ganglionnaire, contre laquelle la thérapeutique se trouvera à peu près sans ressource.

PUBLICATIONS DES ARTICLES SCIENTIFIQUES

A cause du nombre restreint de pages mises à la disposition de la section française du Journal, la Rédaction était obligée, dans le passé, de couper les articles trop longs et d'en reporter la fin de la publication dans une livraison suivante.

Cette façon d'agir enlève énormément d'intérêt à la lecture d'un article et mécontente la plupart des auteurs et des lecteurs.

A l'avenir, au lieu de publier, dans chaque numéro du Journal, deux parties d'articles, un seul article sera reproduit, mais cet article sera complet et le lecteur n'aura pas à en attendre la suite, le mois suivant.

Jusqu'à ce que les restrictions sur le papier soient enlevées et qu'il nous soit permis d'avoir plus de pages, le Comité de Rédaction suivra cette politique.

GERARD DE MONTIGNY



REVUE DES REVUES

"Les mouvements du condyle dans l'étude des pathologies internes de l'articulation temporo-mandibulaire", par M. BURMAN, M.D. et S. SINBERG, M.D.,

(The Journal of Bone and Joint Surgery, avril 1946.)

par ROGER GARIEPY, M.D., Montréal.

Les auteurs rappellent que les mouvements des condyles sont égaux et synchrones quand la bouche se ferme. C'est parce que ces mouvements se font régulièrement et symétriquement que le menton ne dévie pas latéralement à l'ouverture de la bouche.

Normalement, le condyle sort de la cavité glénoïde pour s'engager sous la tubérosité du temporal quand le maxillaire s'abaisse. Par rapport aux autres articulations, cela ressemble à une luxation qui se ferait cependant dans les limites de la capsule et des ligaments. Le condyle glisse sur le ménisque qui est immobilisé par ses adhérences périphériques à la capsule.

Quand un des deux condyles est retenu dans la glénoïde par blocage mécanique, par le ménisque ou rétraction de la capsule, l'autre suivant sa course normale, il s'en suit à l'ouverture de la bouche une déviation du menton du côté malade.

Ces différents mécanismes sont illustrés par de nombreux schémas et radiographies auxquels nous renvoyons le lecteur.

Ce qui importe pour la mise en évidence de ces troubles par la radiographie, c'est de prendre des clichés des deux articulations en deux positions: bouche fermée et bouche ouverte. Un condyle qui reste dans la cavité glénoïde quand la bouche est ouverte témoigne d'une ankylose partielle de cette articulation. Les causes de cette fixité anormale sont nombreuses. Les principaux syndromes cliniques qui se rencontrent à ce niveau sont: la luxation avec interposition du ménisque, la mobilité anormale du

ménisque rupturé qui produit un blocage intermittent, l'asymétrie de croissance des deux branches du maxillaire inférieur (asymétrie faciale, malformations complexes, etc.) troubles de l'occlusion dentaire, naturelle, ou artificielle, prognatisme.

Le diagnostic se fait par l'observation des signes cliniques: déviation du menton, limitation des mouvements, douleur à la mastication d'aliments résistants, etc. et la radiographie. Celle-ci en position de fermeture et d'ouverture de la bouche permet d'étudier la course des condyles sur le temporal.

Le traitement conservateur par l'immobilisation temporaire et la diète liquide donne souvent une disparition des symptômes dans les syndromes aigus, post-traumatiques, infectieux, ou arthritiques. Dans le cas d'un blocage avec luxation irréductible ou d'un resaut articulaire par déchirure du ménisque, l'exérèse totale de celui-ci donne un soulagement sûr et rapide. Dans les cas anciens avec rétraction de la capsule, la résection de celle-ci avec méniscectomie fait généralement disparaître la douleur. Quelques cas de laxité du ménisque et de la capsule se sont améliorés par l'injection de liquide sclérosant dans l'articulation. L'intervention chirurgicale se fait de préférence à l'anesthésie locale.

•
"Nouvelles Observations sur des Facteurs S'opposant à et Favorisant la Carie Dentaire" par C. W. Schartz, D.D.S., et C. A. Scrivener, D.D.S., San Diego, Cal.; Journal of the American Dental Association, février 1946.

Les auteurs attirent l'attention sur certains facteurs, qui jouent un rôle dans l'étiologie de la carie et qui n'ont pas été étudiés à fond par les chercheurs;

10: l'usage de pâtes dentifrices et de rince-bouches peut prédisposer à la carie. Ces substances peuvent détruire souvent des micro-organismes, que la nature a mis dans la bouche et qui font partie du système de défense de l'organisme contre les agents destructeurs de l'intégrité dentaire.

20: Certaines chaînes de ferments contribuent au processus chimique compliqué de la désintégration des tissus dentaires.

30: La présence d'hydrates de carbone (spécialement, le sucre) fournit l'élément nutritif et crée une ambiance favorable au

développement de micro-organismes nocifs, dont le principal est le Lactobacille-acidophile et la levure. Le développement rapide de ces micro-organismes annihile l'action de défense de bacilles protecteurs et élimine bientôt ceux-ci complètement.

Les A. attirent l'attention sur le rôle de défense d'un strepto-bacille, non-toxique, non pathogène, qui n'a pas encore été nommé. En utilisant une substance dérivée de ces bacilles, on augmentera la résistance naturelle aux états pathologiques amenés par le progrès de notre civilisation. Cette étude nous fournit un terrain d'atterrissage pour l'élimination de tout état pathologique et on croit que les caries dentaires aiguës céderont le pas à ce nouveau mode de traitement.

CHEZ NOUS ET AILLEURS

Elections à la Société Dentaire de Montréal

La Société Dentaire de Montréal a tenu, le 11 juin, ses élections pour constituer son Comité Exécutif pour l'année 1946-1947. Ont été élus: Président: Jacques Demers; Vice-président: Raoul Lussier; Secrétaire: Victorien Dubé; Assistant-Secrétaire: Guy Langelier; Trésorier: Louis Lépine; Conseillers: Gaston Lajoie, Alphonse Plessis-Bélair, Euclide Malo, Gabriel Lord; Aviseur: Amherst Hébert.

Le prix Casgrain-Charbonneau 1946 décerné au docteur Jules Thébaud

Le prix de \$500.00 offert annuellement par la Maison Casgrain-Charbonneau aux diplômés de l'Université de Montréal, pour des recherches d'ordre médical a été accordé au Docteur Jules Thébaud, chirurgien-dentiste.

La thèse du Docteur Thébaud est intitulée: "Contribution à l'amélioration du matériel instrumental employé dans le traitement chirurgical de la pyorrhée alvéolaire."

Cette étude analyse dans sa première partie les instruments dont on dispose actuellement pour pratiquer la gingivectomie et le curetage radical; dans sa deuxième partie, ce travail expose sept instruments améliorés par l'auteur et huit instruments nouveaux et originaux fabriqués par le Docteur Thébaud. La description et le mode d'emploi de ces instruments y sont expliqués au moyen de photographies et de dessins au nombre de quinze.

Les membres du jury étaient: le docteur Georges Baril, le docteur Ernest Charron, le docteur Edmond Dubé, le docteur Urgel Gariépy, le docteur Paul Geoffrion, M. Jules Labarre, le docteur Pierre Masson et le docteur J. Roméo Pépin. De plus, le docteur Jules Thébaud vient de recevoir sa licence en Sciences Sociales de l'Université de Montréal.

Assemblée Générale de l'Association Dentaire Canadienne

L'assemblée annuelle de l'Exécutif et du Bureau des Délégués de l'Association Dentaire Canadienne a eu lieu, à Toronto, les 22, 23, 24, 25 mai.

Au cours de ces assises, les élections

furent faites pour constituer le Comité Exécutif et les différents comités, qui s'occuperont de l'étude de questions particulières durant l'année.

Le résultat de ces élections fut le suivant: Ex.-président: Harvey W. Reid, Toronto; Président: V. D. Crowe, Truro, N.-E.; Vice-président: Armand Fortier, Montréal, Qué.; Secrétaire-trésorier: Don W. Gullett, Toronto, Ont.; Conseillers: R. L. Pallen, Vancouver, H. J. Merkeley, Manitoba.

Les présidents des divers comités d'étude sont les suivants: Finance: H. J. Merkeley; Publication: R. P. Lowrey, Ontario; Education: A. L. Walsh, Montréal; Législation: S. W. Bradley, Ottawa; Assurance-Santé: Don W. Gullett; Réhabilitation: G. V. Fisk, Toronto; Den-

tisterie Industrielle: Aberdeen McCabe, Valleyfield, Qué.; Services Auxiliaires: R. A. Rooney, Alberta; Nomenclature: A. M. Revell, Alberta et Gérard de Montigny, Montréal; Constitution: J. S. Bagnall, Halifax; Relations Internationales: Ernest Charron, Montréal; Nominations: Harvey W. Reid; Programme du Congrès: H. M. Eaton, N.-E.; Ethique professionnelle: K. M. Johnson, Manitoba; Recherches: Roy G. Ellis, Toronto; Services Militaires: J. K. Carver, Montréal; Santé et Relations Publiques: H. N. Cline, Vancouver; Comité de Conseils: J. A. Bothwell, Toronto; Spécialisation: R. McMahon, Montréal. Les délégués ont décidé de tenir leur réunion annuelle et le Congrès national à Digby, Nouvelle-Ecosse, en 1947.



DENTISTE JAPONAIS ET SON INSTALLATION

Le Japon souffre comme nous d'une crise de logement. Ce dentiste transporte son équipement d'une ville à l'autre dans la région de Yolsohama.

(J.A.D.A. vol. 33, No. 15, février 1946)



PAGES EDITORIALES

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RAPPORT ANNUEL DU REDACTEUR A LA REUNION DU BUREAU DES DELEGUES DE L'ASSOCIATION DENTAIRE CANADIENNE. (1)

M. le Président, M.M. les Délégués:

La rédaction de la section française de notre Journal a changé de directeur depuis le premier jour de mars 1946.

Le docteur Alcide Thibaudeau, nommé rédacteur du journal, vers l'année 1936, a démissionné et le soussigné a été nommé, pour lui succéder, par le Collège des Chirugiens-Dentistes de la Province de Québec.

Le docteur Thibaudeau a été un défricheur dans ce domaine. Comme Rédacteur, il a consacré pendant dix ans son énergie à l'amélioration de la section française du Journal de l'Association Dentaire Canadienne.

Le Journal perd un rédacteur clairvoyant et compétent, et son exemple nous trace un modèle pour l'avenir.

Changements Apportés à la Section Française

Quelques modifications ont été faites dans la disposition du texte de la partie française. Ces changements sont les suivants:

1°: les articles, qui autrefois étaient imprimés sur une seule colonne, le sont maintenant en deux colonnes pour faciliter l'insertion des gravures.

2°: un nouvel en-tête orne maintenant la première page de la section française. Ce nouveau titre est identique à celui inscrit au début de la section anglaise. Cette modification donne plus d'unité aux deux sections de la Revue.

3°: une page éditoriale est insérée tous les mois. Cette page est ornée des écussons de l'Association Dentaire Canadienne, de l'Association des

(1) Tenue à Toronto, les 22, 23, 24, 25 mai, 1946.

Chirurgiens-Dentistes de langue française de l'Amérique du Nord, de la Société Dentaire de Montréal.

Suggestions Pour Améliorer la Section Française

Le rédacteur a-t-il d'autres projets de nature à améliorer le rendement du Journal? A première vue, le lecteur qui feuillette les pages du Journal de l'Association Dentaire Canadienne, a l'impression de lire une revue anglaise, où il trouve quelques pages de français, à la fin.

Cependant, notre Journal—et l'Association Dentaire Canadienne se glorifie de ce fait—est la *seule* revue dentaire bilingue dans le monde entier.

Presque tout le texte (ex.: livraison de mars 1946: 43 sur 55 pages) est rédigé en anglais. Presque toutes les annonces, pour ne pas dire toutes (ex.: livraison de mars 1946: 56 2/3 sur 57 pages) sont rédigées en langue anglaise.

Tous les communiqués officiels de l'Association Dentaire Canadienne paraissent en anglais, dans la section anglaise de la Revue, seulement.

Même l'annonce officielle du Congrès national, qui doit être tenu à Toronto bientôt, a été publiée en anglais seulement, quoique les dentistes canadiens-français, qui sont membres de l'Association, y fussent cordialement invités.

Les nouvelles de l'Association, qui intéressent tous les dentistes du Canada, sont uniquement publiées dans la section anglaise.

Pour améliorer cet état de choses, je suggère une nouvelle façon de procéder:

1°: L'Association devrait embaucher une sténographe bilingue, compétente, qui traduirait en langue française tous les écrits, émanant du bureau du secrétaire général. Ces rapports seraient communiqués, en même temps, aux rédacteurs des sections anglaise et française pour être publiés dans la même livraison.

2°: La section française devrait avoir plus de pages, au moins huit pages supplémentaires. Il y a un surplus de communications intéressantes, que nous ne pouvons publier, parce que nous manquons d'espace. Nous devons couper en deux ou trois parties la plupart des articles, que nous publions. Les auteurs et les lecteurs, en général, n'approuvent pas cette façon de procéder, parce que l'intérêt des communications est ainsi beaucoup diminué. Le manque de pages nous force aussi à omettre des nouvelles d'intérêt immédiat, qui perdent de leur saveur, remises à plus tard.

3°: Les annonceurs devraient savoir que notre Journal est bilingue et qu'une partie de leur clientèle est française.

Impression du Journal

L'édition de la Revue, à Toronto, par des techniciens qui ne parlent et n'écrivent que l'anglais, complique sérieusement la tâche du rédacteur français, qui demeure à Montréal. La différence de langage et la distance entre les deux villes handicapent les résultats de l'impression finale.

Serait-il possible de faire imprimer la section française à Montréal et de l'expédier ensuite à Toronto pour être jointe à la section anglaise?

Le contact fréquent et personnel du rédacteur avec l'éditeur est important pour la compréhension et la reproduction parfaite du texte écrit.

Relations Internationales

Nous, Canadiens-français, constituons le seul groupe dentaire important de langue française d'Amérique. Cette situation devrait nous créer des relations avec les dentistes de langue française d'outre-mer, par l'intermédiaire de notre journal. Nous recevons des demandes de renseignements de France, de Belgique et de Suisse et les dentistes de ces pays désirent renouer connaissance avec l'Amérique. Cet espoir de ré-établir des contracts avec la profession dentaire d'Amérique est bien naturelle pour ces dentistes qui ont été isolés du monde extérieur durant la guerre.

A cause de leur langue, ces confrères européens comptent sur nous, Canadiens-français, pour servir de lien entre eux et l'Amérique.

Je crois que nous devrions faire quelque chose pour faciliter la reprise de ces relations internationales, qui sont de nature à aider ces confrères étrangers et à nous aider aussi. Notre revue est le médium tout indiqué pour ces échanges d'idées et nous devrions trouver un moyen de la faire connaître davantage en Europe.

Nouvelles Des Sociétés Dentaires

Nous nous sommes mis en contact avec les différentes sociétés dentaires de langue française de la Province de Québec pour leur demander de nommer, au sein de leur Exécutif, quelqu'un qui transmettrait au Rédacteur les rapports de leurs assemblées, leurs communications et leurs nouvelles. Cette démarche a pour but la publicité de chacune des sociétés intéressées et la publicité des événements du monde dentaire canadien-français.

Conclusions

Le nouveau rédacteur de la section française du journal doit avouer qu'il ne connaissait pas beaucoup, avant d'accepter son poste, les activités de l'Association Dentaire Canadienne. Maintenant, il réalise beaucoup mieux le rôle que cette Association nationale est appelé à jouer dans notre vie professionnelle. C'est un point de vue qu'il faut faire connaître clairement à nos confrères de la Province de Québec. Plusieurs ne l'apprécient pas à sa pleine valeur, parce qu'ils ne la connaissent pas.

Le devoir du Rédacteur est de faire voir le travail et l'idéal de notre Association et c'est une tâche qu'il accepte avec plaisir.

Le Rédacteur entrevoit une destinée brillante pour notre Association et croit que le Journal est le joint naturel entre les membres de notre profession. Mes relations avec le Secrétaire, le Rédacteur de la section anglaise et les éditeurs ont été des meilleures et c'est avec beaucoup d'intérêt et de joie que j'accomplis mon travail de Rédacteur de la Section française du Journal de l'Association Dentaire Canadienne.

Respectueusement soumis,

Montréal, mai 1946.

GERARD DE MONTIGNY.

LES DENTS ET LES MACHOIRES ONT BESOIN D'EXERCICE

Il est évident que les dents, les maxillaires et la figure humaine subissent des modifications dans le cours des âges. Des défauts dentaires, comme la carie et les malpositions, inconnus des peuplades primitives, sont apparus chez les nations civilisées. Où réside la cause de cette dégénérescence? Une alimentation défectueuse, nous répond-on. De là, un engouement pour les diètes basées sur les vitamines et les sels minéraux. Le docteur Meyer Klatsky, de New York, démolit cette théorie dans un article publié dans le *Journal of the American Dental Association*. Selon lui, l'appareil masticateur manque d'exercice: nous mangeons une nourriture trop molle. Ces habitudes de l'âge moderne contribuent à la détérioration des organes dentaires.

Ces conseils sur l'alimentation ont appris à l'homme de la rue à choisir ses aliments avec plus de discernement et ont été répandus sous toutes les formules possibles: on a répété, partout et à tous, l'importance des vitamines et des minéraux dans une diète balancée. Cependant, Klatsky trouve "qu'il n'y a rien de bien changé dans l'état des dents et des gencives", malgré cette réclame à outrance des bienfaits de l'alimentation rationnelle.

Le corps tout entier en souffre.

L'auteur souligne l'influence qu'aurait une alimentation irrégulière sur l'organisme tout entier et non seulement sur l'appareil dentaire. Et pourtant, d'après les anthropologues, l'homme moderne affiche une supériorité physique marquée sur son ancêtre. Weston Price, un explorateur connu et souvent cité, est de cet avis.

Le docteur E. A. Hoston, de Harvard, attribue le développement plus normal du squelette de l'homme contemporain à un équilibre plus rationnel des muscles et des organes. Le docteur Klatsky trouve ici la clef des troubles dentaires. Ce confrère a étudié au fluoroscope l'action des muscles de la mas-

tication et a même cinématographié, à l'aide des Rayons-X, des sujets en train de mâcher des mets différents: lait, pain blanc, oranges, pain durci, céleri, bifteck, blé-d'Inde. Les aliments plus coriaces, stimulent d'avantage l'appareil dentaire.

Aliments durs.

Cette étude cinématographique et radiologique a convaincu Klatsky que "le volume des maxillaires, la vigueur des muscles de la mastication et la santé des dents des races primitives tiennent à une fonction plus active des organes masticatoires: la consommation d'aliments plus durs, plus fibreux, plus résistants et plus grossiers favorisent cette hyperfonction." La table moderne offre trop de plats cuits, écrasés, passés au tamis, triturés d'avance. L'existence nerveuse, remplie, hâtive que nous vivons, demande la consommation de nourriture facilement mastiquée et rapidement avalée. On met l'importance de notre alimentation, non sur sa mastication, mais sur son goût et son apparence. Les parents apprennent à leurs enfants à manger sans attirer l'attention. L'ouverture démesurée de la bouche, une mastication laborieuse et les bruits produits par les lèvres et les dents sont défendus. Des tributs indiennes, au contraire, considèrent comme une suprême impolitesse, le fait de ne pas lapper leurs lèvres après un bon repas.

Les professeurs de culture physique élaborent des exercices spéciaux pour le cou, les bras, les jambes, les épaules et les poulmons. Personne ne pense à développer les muscles qui servent à la mastication. Klatsky finit en disant: "la carence d'exercices musculaires est le facteur responsable de la dégénérescence de l'appareil masticateur, chez l'homme contemporain." Les maxillaires sont peu développés, les dents sont en malposition, la bouche est dans un état pathologique tel que la carie s'y installe facilement.



CHRONIQUE JUDICIAIRE

Responsabilité—Chirurgien-dentiste—Extraction d'une dent—Radiographie—Traitements appropriés—Divergence d'opinion parmi les hommes de l'art—Absence de faute chez le dentiste—Retard du défendeur à se faire traiter par un spécialiste—C. C., art 1053.

Lorsqu'un patient se plaint d'un dentiste pour le motif que lors de l'opération, la dent qu'il s'agissait d'extraire fut brisée, que la gencive fut laissée dans un état d'infection et que l'extraction aurait été faite en violation des règles de l'art, le tribunal doit rejeter l'action en dommages-intérêts si l'extraction était devenue nécessaire et qu'aucune faute n'a été relevée contre le défendeur.

Un dentiste n'est pas tenu d'obtenir une radiographie à moins de constater par l'apparence de la gencive que cela s'impose.

Rien ne permet d'affirmer qu'une sinusite dont le demandeur a souffert ait été causée par l'extraction. La sinusite, d'après les témoignages, est une maladie qui peut être sub-séquente à l'extraction, mais qui est plus généralement causée par l'infection antérieure d'une dent.

Si une lettre de recommandation adressée à un spécialiste est remise par le défendeur au poursuivant qui, par négligence, retarde un mois avant de la communiquer au médecin désigné, le demandeur ne saurait reprocher au défendeur de ne lui avoir pas conseillé de recourir à un spécialiste.

L'erreur que le défendeur aurait pu commettre en n'appliquant pas des traitements plus appropriés, ne saurait constituer une négligence, s'il y a divergence d'opinion à ce sujet entre les experts entendus.

ACTION en dommages-intérêts (\$437).

Jugement: Le 24 août 1942, le demandeur se rendit chez le défendeur qui est dentiste pour lui demander de lui extraire une dent malade. L'extraction fut faite par le défendeur négligemment et contrairement à toutes les règles de l'art; la dent fut cassée et la gencive fut laissée malade et infectée. Comme conséquence de cette extraction, le demandeur dut, les 29 août, 1er, 4, 8 et 18 septembre se rendre chez le défendeur pour lui demander de le traiter vu que l'état de sa bouche et de ses gencives empirait continuellement. Le

défendeur fit défaut de donner au demandeur les traitements que son état exigeait et laissa le mal empirer. Par suite de la négligence et de l'incurie du défendeur, le demandeur dut recourir aux services d'autres médecins, et finalement sur les instructions de ces médecins le demandeur fut hospitalisé du 28 octobre au 2 novembre 1942 et y subit une opération.

Les dommages au montant de \$437 que le demandeur dit avoir résulté directement de la faute et incurie du défendeur sont détaillés comme suit: (détails).

Par sa défense le défendeur nia toutes allégations d'incurie et de négligence de sa part dans l'extraction de la dent et plaida spécialement: Le défendeur donna au demandeur les traitements qu'exigeait son état, des lavages à l'alvéole au permanganate de potasse, procéda à des badigeonnages au métaphène, à la cautérisation du bourgeon et au drainage de l'alvéole. La bouche du demandeur était en très mauvais état et, par anomalie, les racines de la dent extraite pénétraient dans le plancher du sinus gauche. L'extraction de cette dent devait nécessairement provoquer l'ouverture du plancher du sinus, ce que le défendeur ne pouvait prévoir. Le 18 septembre, le défendeur avertit le demandeur de revenir à son bureau pour continuer les traitements. Contrairement aux recommandations et instructions du défendeur, le demandeur abandonna tout traitement le 18 septembre 1942 jusqu'aux jours de son entrée à l'hôpital. Postérieurement au 18 septembre 1942, à une date qu'il lui est impossible de préciser, le défendeur jugea bon de conseiller au demandeur, après l'avoir examiné, d'aller voir le docteur X... spécialiste, et la pria de passer le même jour pour prendre livraison d'une lettre d'introduction auprès de ce spécialiste. Le demandeur ne vint chercher cette lettre que plusieurs jours plus tard et ce n'est aussi que plusieurs jours après avoir été mis en possession de cette lettre que le demandeur se rendit chez le spécialiste susdit, sans cependant consentir à se faire traiter. La sinusite dont le demandeur a souffert n'est pas due au fait que l'extrac-

tion de la dent aurait été faite contrairement aux règles de l'art ou à l'absence de soins à donner en pareil cas. Si une radiographie de la gencive supérieure gauche du demandeur avait été prise avant l'extraction, ce à quoi le défendeur n'était pas tenu et ce qu'il ne pouvait faire pour le prix de l'extraction demandée, elle n'aurait pas eu pour effet d'empêcher la sinusite. . .

Considérant qu'aucune faute n'a été prouvée contre le défendeur touchant la façon dont la dent du demandeur a été extraite et que l'extraction d'icelle était devenue nécessaire par suite de son état;

Considérant que le défendeur n'a pas été requis de prendre une radiographie de la dent avant son extraction et que le défendeur, à moins d'avoir pu constater par l'apparence extérieure de la gencive que cela s'imposait,—ce que l'enquête ne révèle pas—n'y était pas tenu dans les circonstances. La nécessité d'une radiographie après l'extraction n'existait pas non plus, d'après le Dr P. . . , dès que la dent avait été extraite en entier;

Considérant que rien ne permet d'assurer que la sinusite dont le demandeur a souffert ait été causée nécessairement par l'extraction de la dent et encore moins par une extraction fautive et négligente: la sinusite, d'après la preuve, est une maladie qui peut être subséquente à l'extraction et qui est plus

généralement causée antérieurement par l'infection d'une dent;

Considérant que la négligence attribuée au défendeur dans les traitements de cette dent ne peut consister dans l'erreur que le défendeur aurait pu commettre en ne recourant pas à des traitements plus appropriés vu la divergence d'opinion à cet égard entre les témoins experts qui ont été entendus, cette Cour n'ayant pas à se prononcer sur l'efficacité et la qualité de traitements scientifiques sur lesquels les personnes de la profession ne s'entendent pas;

Considérant qu'on peut raisonnablement croire, dans l'espèce, à une sinusite ayant une cause étrangère à toute faute attribuable au défendeur et qu'à raison de la négligence et du retard du demandeur à recourir lui-même aux soins du médecin spécialiste de la tête pour lequel le défendeur lui avait donné une lettre d'introduction, le demandeur n'est pas fondé à se plaindre que le défendeur ne lui ait pas auparavant conseillé de recourir à un spécialiste. A signaler que le Dr S. . . , spécialiste, auquel la lettre du défendeur était adressée a déclaré qu'elle ne lui avait été communiquée, que le 26 octobre 1942 alors qu'elle était datée de plus d'un mois auparavant;

Action rejetée.

(LA REVUE DU BARREAU)

L.-A.P.





Photograph by C. N. Stephens, Courtesy of The Beaver.

OWAHSHESHUK
(Ojibway Indian Child)



L. D. HASELTON, D.D.S., B.A.
Saskatoon, Saskatchewan

Associate Editor for Saskatchewan of the Journal of the
Canadian Dental Association.

Past President of Saskatoon Dental Society.

Member of the Saskatchewan Dental Health Educational Committee.

Lecturer on Odontology, City Hospital.

Deputy Chairman of the Public School Board, and Chairman of
the School Management Committee.

PROBLEMS IN DOING DENTAL WORK FOR CHILDREN*

by DR. S. R. LAYCOCK

Professor of Educational Psychology, University of Saskatchewan

WHILE all professional workers need an understanding of the relatively new science of psychology it seems to me that dentists have an urgent need for such knowledge. It is always true that the weaknesses and strengths of individuals are revealed in times of stress and crisis. Dental work, because it is relatively unpleasant for most folks, is apt to show up an individual's characteristics and degree of development about as well as any of the ordinary situations of human life. Dentists, therefore, have to be interested in such things as the degree of emotional maturity which their patients have attained. Being emotionally mature means three things: (1) to be able to bear tension without blowing up—that is to stand the ordinary annoyances and pains of human life without losing one's temper, dissolving into tears, pouting, sulking, feeling sorry for oneself, having one's feelings hurt or developing a sick headache; (2) to be able to take responsibility for oneself without being too emotionally dependent on parents or friends—that is, to be able to stand on one's own feet; and (3) to be able to come to a working compromise with life—to know that the tail goes with the hide and, so far as dental work is concerned, to realize that the price of having healthy teeth and good general health may mean submitting

oneself to some unpleasant aspects in dental treatment.

You will agree, I am sure, that this question of how emotionally grown-up your patients are applies not only to children but to those of all ages who come to your office. There are hosts of individuals who have grown-up bodies who have not grown up emotionally. However, those of you who do dental work for children have special problems since youngsters are in the process of growing up—not only physically but emotionally and in other ways as well.

Dentists should have a particular interest in the study of child psychology not only for the sake of understanding the children with whom they deal but also for the sake of dealing with the grown-up children who come to the dental office and whose personality characteristics grow out of the early handling they received in their own homes. Most of the problems which dentists have with children and adults arise long before the individual ever comes near the dentist at all. They have their origin, for the most part, in the handling of the boy and girl or man and woman received in their own home in the first four or five years of life. Many a time I have told high school teachers that if they really wanted to avoid the difficulties they encounter in handling teen-agers

*An address delivered at the Dental Clinic arranged by the Canadian Dental Hygiene Council and the Canadian Dental Association at Regina April 24, and Saskatoon April 26, 1946.

they should go around organizing study-groups for the mothers of pre-school children. It seems to me that I could give dentists the same advice. Dentists might well give active support to organizations like the Home and School or Parent-Teachers' Association which promotes a program of parent education.

From a practical point of view dentists are interested in two things: (1) what kind of boys and girls come into the office; and (2) how to handle them when they do get there.

UNDERSTANDING THE CHILD

In trying to understand children let us be clear at the outset that, while children are born with a certain physical and mental constitution which varies greatly from child to child, most of the specific forms of behaviour of children are the result of the way they are handled in their early years. Without going into the relative contributions of nature and nurture—and the influences of both are always intertwined in human behaviour—we might agree that, whatever predispositions may exist, whether a child does develop temper tantrums, stubbornness, sulking, pouting, shyness, self-pity, oversensitiveness or specific fears, depends on the kind of handling he has had and the kind of environment he has lived in during his early years. Many a bad temper which is put down to inheritance is the result of contagion. The youngster "caught" it from his dad. Or it may be the result of the way his mother handles him. Indeed I could suggest several reliable ways by which you can develop temper tantrums in any child. Similarly a child does not inherit his shyness from his Aunt Annie; rather it develops as a result of too harsh handling, too much coddling, too little experience in handling social situations and in a number of other ways.

Children's fears are also a source of concern to the dentist. Psychologists are convinced that specific fears are all home grown. The best scientific

knowledge, at present, is that infants are not born with specific fears. Indeed it is doubtful if fear, as such, is present at birth at all. What is present is a tendency towards a stirred-up organic state of emotional excitement which is set off by intense or unexpected stimuli like loud noises, flashes of light or falling. Fears as such, including fears of dentists, doctors and policemen are all developed. They can be developed in many ways. First of all fears may be "caught" from adults. Research has shown that there is a definite relationship between the fears of mothers and their children. If children hear parents talk about dental work as a dreaded and dreadful experience they come to share the parents' fear of entering a dental office. Indeed, because the experience is something vague and in the realm of the unknown they are likely to exaggerate the horrible nature of dental work. As a matter of fact, the mother may herself exaggerate the discomfort and pain of her experience with the dentist. It is like talking about operations. To a great many people operations "are worth it" because it enables them to get a real sense of recognition and self-esteem through bragging about what they have passed through. However that may be, it is certain that homes often build up in children fears of having dental work done. This is done by the parents and older children magnifying the dreadful nature of the experience through which they (the heroes of the story) have passed or are about to pass.

Another way in which fears of dentists may be established is for a parent to threaten the child with the dentist—that if he doesn't behave he'll be forthwith taken for dental treatment. Mothers are still found who use doctors, dentists, policemen and even fathers as bogeymen to scare the child into good behaviour. This, of course, is inexcusable. To implant such fears is to handicap a child and create all sorts of difficulties later on. Parents should

teach children that the doctor, the dentist and the policeman are their friends.

Occasionally a child's fear of a dentist has more legitimate grounds. If he has had a painful experience on his first visit to a dentist he is likely to develop a fear of the dental office. Usually, however, a fear which has arisen in a dental office is the result of a dentist who does not understand children and has handled the child in too abrupt or unsympathetic a fashion.

Let us now return to another aspect of the problem which dentists doing children's work must face and which is the result of early training in the home — that is the problem of the spoiled child. By that I mean the child who is a cry-baby, negativistic, stubborn, sulky, unco-operative, bad-tempered, etc. Have you ever stopped to consider what the term "a spoiled child" means? Well, you know what spoiled meat or spoiled fruit is. It isn't fit to use. That is exactly what a spoiled child is—he isn't fit to use, that is to live with other people. When parents train children in poor ways of getting along with others they do the child a great injury. It is far worse than if they taught him wrong spellings or wrong multiplication tables. The dentist, along with others who must live or work with the "spoiled brat" reap the results of parental indulgence, ignorance or incompetence. They reap it in the child who won't come in the inner office or sit in the chair or open his mouth or who throws a temper tantrum or who bawls merely when looked at. In such cases dentists soon come to take the viewpoint of the psychologist that it isn't a question of problem children but of problem parents, particularly problem mothers.

CHILDREN'S PSYCHOLOGICAL NEEDS

While every child is different in the specific aspects of his behaviour, children have certain basic needs in common and if we are going to understand how to train children or to handle them we must understand these needs.

Children, in common with all other human beings, have certain basic physical and psychological needs. The physical needs are obvious and highly important — the needs for adequate nutrition, rest, sleep, active play, etc. I shall leave the discussion of the physical aspects to someone trained in that field and turn my attention to the psychological needs of children. They are five: (1) the need for emotional security—that is the need to feel they are loved and wanted by their parents and others and that they "belong" in the family group, the play group, the school group, etc; (2) the need for independence—reasonably to make one's own decisions and to run one's own life; (3) the need for achievement—to do things, to make things, to accomplish things; (4) the need for recognition—to win the approval of others for one's conduct and personality; (5) the need for a sense of personal worth—to feel that one's personality and conduct come up to one's own inner standards. Let us look briefly at these needs in turn and consider how they affect the behaviour of the children with whom dentists must deal.

Modern psychologists believe that, next to a reasonable amount of food, the most important need of children is to feel secure in the love and affection of their parents, their family, their teacher and their friends. A huge proportion of delinquent and neurotic children come from homes where they have lacked emotional security. Stealing, lying, destructiveness, stubbornness, shyness, bad temper, and other poor behaviour traits are very often the child's response to a world on which he cannot count for love and affection. The baby when born is interested only in himself—in his own whims and impulses. In the normal home, however, he gradually gives up doing entirely as he likes in return for his mother's and later his father's love and affection. Growing up, therefore, is an alternating process and a nice balancing of gratification and renunciation. The child who is cheated of his parents'

love and affection has no incentive to restrain his selfish impulses. He has no encouragement to learn good ways of living with other people. Indeed, finding his world unsatisfactory, he often lashes out at it in a destructive fashion or else settles for the spurious security of the delinquent gang. The things which make children feel insecure in their own homes are parents who quarrel, parents who don't agree on discipline, a parent who is inconsistent in discipline from day to day, too much coddling, too harsh treatment, indifference, too much emphasis on high marks in school when the child has not much academic ability and a host of other things. The difficult child who comes to the dentist's office, the one who is hard to handle, is often the insecure child—the one who has no secure emotional base which will help him to take in his stride such problems of life as having dental work done. In addition, dentists have to deal with many grown-ups who were emotionally insecure in their childhood homes or who are, at the moment, insecure in their family and personal relationships. Behaviour manifestations cannot, therefore, be taken at their face value. Children are not naughty out of sheer cussedness. Their behaviour grows out of their attempts to meet their unfulfilled needs.

While no dentist can attempt to make up to a child for years of insecurity in the latter's own home, yet an understanding of a child's behaviour is important in handling him. In addition the dentist needs to help all children to feel secure with him—to feel that he is their friend and is interested in them. Sometimes this will mean a visit by the child to the dentist's office before dental work is required. In any case the dentist must take some trouble to gain the confidence and liking of the child so that the youngster feels he is in friendly hands. Furthermore the wise dentist has to know when to exercise firm authority. Stern discipline will only cause fear and tension in the child, whereas an insecure child often

needs the security of a quiet insistence that the work is going to be proceeded with and that the dentist knows what he is doing and is really concerned over the child himself. Insecure children need an orderly world. Quiet insistence on going ahead and genuine friendliness may be very helpful to them.

The second psychological need of children is for independence. All human beings want to have some reasonable share in running their own lives and making their own decisions. Arbitrary giving of orders usually stirs up resentment in children as well as adults. It is very wise handling if a child can be guided to feel that coming to the dentist is a job he has taken on his own shoulders. It is important, too, that a youngster feels that having his teeth cared for is a job in which he himself co-operates with the dentist. Where a child is dragged to the dentist's office and the dentist's chair by the scruff of the neck the going is going to be difficult for mother, child and dentist. Helping a child to feel that having dental work done is the result of his own decision and own co-operation not only makes it easier for the dentist but it contributes to the personality growth of the child as well.

The third psychological need of children is for achievement. This need should be wisely used in the rearing of children in order to help them to develop the kind of characteristics we would like them to have. Children can find outlets for the need for achievement in hundreds of ways—in making a good mud-pie, in building a house of blocks, in running a toy train, in putting on their own clothes, in playing nicely with others, in washing the dishes, in running errands, in being able to eat nicely at table, in learning to read or to spell or do arithmetic, and in learning to skate or play hockey or play ball, *or*—and it's a big "*or*," they may find a sense of achievement in being a champion liar, a clever thief, a holy terror at home or in the neighbourhood, and in being rude, discour-

eous, bossy, boastful, badtempered or oversensitive. Children, like other human beings, must find a sense of accomplishment some way. It is up to parents, teachers and others to guide the child to find outlets for this need in ways that help others, not harm them. It is in this way that children's emotional maturity can be developed. They can be helped to find a real sense of accomplishment in standing up to difficulties without blowing up, in standing on their own feet, and in being able to come to a working compromise with life. The child can find in coming to the dentist's office and having his dental work done a real sense of being grown-up—of being able to stand up to a little unpleasantness if necessary in order that he may have healthy teeth and a healthy life. If the parent and the dentist handle the visit to the dentist's office wisely it can mean much in the progress of the child towards emotional maturity.

What I have said about the need for achievement applies also to the child's needs for recognition and self-esteem. He is bound to find satisfaction for these needs. The question is how shall he find the satisfaction. If a child gets the recognition of others for being a smart-aleck or a holy terror he'll get his satisfaction in these ways. Indeed, many a child gets a great deal of recognition from others for bad behaviour—more than he gets for good behaviour. If the mother tells how she can't do a thing with the youngster, or if she says she can't believe a word he says, or if the child finds that refusing to eat brings him attention or if bed-wetting or stealing or lying brings him attention, then the youngster is going to seek recognition in these ways. Unfortunately many parents and teachers confine their attention to bad forms of behaviour. When the youngster's behaviour is good it is accepted as a matter of course and no comment is made. We should remember that if we want to build up good behaviour in children the beginning of such behaviour must have plenty of praise and recognition.

A child whose parents have given plenty of recognition to his holding his temper, and to standing up to situations without crying or sulking or feeling sorry for himself is not likely to cause much trouble to the dentist. On the other hand the child who has staged eating strikes, bed-wetting, stealing, lying, temper tantrums, pouting spells, or crying outbursts in order to get attention is likely to be a nuisance to the dentist. The dentist himself must see that the child gets plenty of recognition for coming to have his teeth looked after, for getting into the chair and co-operating, and standing up to things like a man. Good behaviour in children should never be taken as a matter of course nor should bad behaviour be given all the attention.

Perhaps this is the place to discuss whether a mother should come with the child into the inner office. Sometimes this is necessary in order to make the timid child feel secure. If so it is quite in order. On the other hand many children put on a show for the select audience of their mother. They are naughty because it brings them recognition and attention from her. It is well to remember that behaviour does not take place in a vacuum. It always has a social setting. Children always *behave towards someone*. Cases are well known where a child's behaviour is quite different towards the mother than towards other people. The child who uses his mother for an audience or who uses bad behaviour as a means of controlling her should not have his mother in the inner office. Indeed, dentists would do well to go further and to make it a rule not to allow mothers to discuss children in the latter's presence. If the mother is allowed to say: "Jean is such a sensitive child" or "Billy never wants anyone to touch his teeth" it makes the situation much more difficult for both dentist and child.

The last need of children is for a sense of personal worth. Every human being has this need. There can be no mental health without some reasonable

satisfaction for this need. The last two words of the text, "Thou shalt love thy neighbour as thyself," are important. The person who feels inferior and inadequate is so busy holding his tottering self up that he has no time to help others. The child, like everybody else, must find self-esteem in some fashion. How he finds it depends on his experiences with people in his home, school and community. He can find it by being kind, considerate, generous, honest and truthful and through worthwhile accomplishment in school work, sports, music, art or dramatics, or he can find it in being outstanding as a bully, a thief, a liar or a roughneck. Happy is the child whose home teachers, school teachers and community teachers help him to find his sense of worth in learning to bear tension without blowing up, in learning to stand on his own feet, in learning to make his own decisions and to take responsibility for himself and others. Such a child will be a joy to the dentist who has to take care of his dental needs. The dentist, however, must contribute to the development of a child's self-esteem by seeing to it that the child's co-operation in the dental chair ministers to that self-esteem.

THE DENTIST HIMSELF

So far we have been talking mostly about children and parents. It is time we looked at the dentist himself. He, too, is a human being. He has the same basic psychological needs as the child. He too has reached some stage of emotional maturity, social maturity and intellectual maturity. His characteristics, too, are the product of his early environment. His personality patterns powerfully affect the behaviour of the child who comes to him. A couple of years ago I had the opportunity with funds supplied by the National Committee for Mental Hygiene to study the effects of the teacher's personality on the behaviour of pupils. I assure you that it is very observable. The dithery teacher had a dithery

classroom; the tense teacher a tense one. I visited 185 classrooms from Montreal to Nanaimo. In one high school on the same afternoon I saw a class of Grade X boys, who in the first classroom I labelled as the best class I had seen in my travels and then, without knowing they were the same boys, I labelled them the worst class I had seen in my travels. The difference was in the teachers. Pupils reflect the strengths or lack of inner resources displayed by their teacher. In like manner the problems that occur in dental offices are not all the result of the characteristics of the patients. The degree of maturity of the dentist is highly important. So is his understanding of child nature or of human nature for that matter. Handling other people professionally is a job for adults only. And by adults I mean not merely those with grown-up bodies but those who have grown up emotionally, socially, intellectually and morally. Just as parents would profit by understanding themselves and why they react as they do to children's behaviour so many dentists would profit by a clearer understanding of their own maturities and immaturities of personality and how these affect the behaviour of their patients.

SUGGESTIONS

And now, may I close my address by offering a couple of specific suggestions. First I would suggest that your Council make common cause with other citizens in an attempt to improve parent education. Perhaps one way in which you could do this would be to publish a pamphlet which would relate what is known about child psychology and child development to the problems which practising dentists find in doing dental work for children — and for adults for that matter. As this is essentially a mental hygiene problem perhaps you could get a body like the National Committee for Mental Hygiene (Canada) to sponsor such a publica-

tion. Certainly you would need to see that such a booklet had a very wide distribution especially to the mothers of pre-school children and to pupils in high school courses in homemaking and the care of children. My second suggestion I make with a great deal of diffidence, and that is that you make available to practising dentists some practical knowledge of applied psychology and mental hygiene which would help them to make the most adequate use of their own personality resources in dealing with children and adults and which would increase their understanding of the human beings with whom they deal. I expect that it is important that dentists sometimes be reminded that their chief job is not to deal with teeth but with persons and that their job is not merely a high grade skill but a task of establishing

satisfying human relationships with their patients. It is well to remember that the whole child comes to the dentist's office. He brings with him not only all the good or bad teeth but a whole set of behaviour patterns which have been established at home, school and community. It is well to remember further that what happens in the dentist's office is an experience which affects the child's development. It may increase his fears, his stubbornness, his resentments or his tendency to handle difficulties in an infantile fashion. On the other hand the experience may contribute greatly to the child's personality development with respect to growth toward emotional, social and intellectual maturity. In that sense the dentist is a personnel worker as well as a highly skilled professional worker.

THE APPLICATION OF DRUG THERAPY IN DENTAL PRACTICE*

by DAVID H. MacDONALD, D.D.S., Toronto, Ontario

MODERN pharmacology is a comprehensive science which is striving constantly to alleviate pain and to otherwise alter temporarily the course of certain physiological processes of the body for the professions of medicine and dentistry. I wonder if we as dentists can truthfully say that we are using to the fullest degree the drugs available to us in our daily practices? Are not many of us victims of advertising propaganda on headache nostrums and neuralgia reliefs that prompt us to tell a patient to "take a couple of aspirin if you have any pain".

The purpose of this article is to outline briefly some of the more practical drugs that are useful in dentistry from the point of view of premedication and post operative analgesia.

PREMEDICATION

There are many drugs that may be used for producing depression of the central nervous system as a premedicant, among which are morphine, bromides, chloral hydrate, and the barbiturates. The last group is the one of choice as a barbiturate is one of the easiest drugs to take and is very effective. Of the barbiturates available, we select a short acting one and the best is pentobarbital sodium, known as nembutol. There is probably no other premedicant better suited to our type of practice.

There are several indications in dental practice for premedication. The one which occurs to most of us immediately is as an adjunct to general anaesthesia. When used as such, our

*Notes taken in a post graduate course in Pharmacology from Dr. Ferguson, Dept. of Pharmacology, Univ. of Toronto.

drug will allow us to give a more uniform anaesthesia with a less stormy excitement stage, and will permit the use of larger quantities of oxygen with nitrous oxide, to produce the same stage of anaesthesia. The recovery period is, however, longer with premedication than without.

If we are going to give nembutol before a general anaesthetic, it should be given at least a half hour before the operation. The most common indications for its administration are on the class of patients that normally cause considerable trouble under N_2O such as the hearty out-door types and alcoholics.

Under local anaesthesia it is well to give premedication before any fairly extensive surgery such as the removal of a cyst, an alveolectomy, or an impacted tooth. The action of the drug is to lessen the tension of the patient and to thus give the operator a greater cooperation. At the same time, the patient has little if any unpleasant recollection of the operation. This is particularly true of children, and of adults who come in announcing that they "are allergic to novocaine because they always faint after an injection". We know that most of these cases are mental,—the combination of a vivid imagination and a needlephobia. Very few of them will faint after premedication.

In operative work there are many nervous patients who could be spared hours of tension if they were given some nembutol before their appointments. We have all had discs and burs used in our own mouths and even with a local anaesthetic we find our minds overactively trying to concentrate on something far removed from the room to drive out the tension of the operation at hand. A central nervous system depressant will do this in a pleasant way.

Nembutol comes in capsules of Gr. $\frac{1}{2}$, $\frac{3}{4}$, $1\frac{1}{2}$ and is usually expressed in grains rather than the present trend toward the metric gram system. The

dose for adults is $1\frac{1}{2}$ grains and for children, $\frac{1}{2}$ to $\frac{3}{4}$ gr. In general, to compute the dose for children of any drugs, we may use Young's rule.—

$$\frac{\text{Age}}{\text{Age} + 12} = \text{fraction of adult dosage}$$

$$\begin{array}{r} \text{Example: Age of patient, 4} \\ \frac{4}{4 + 12} = \frac{4}{16} = \frac{1}{4} \text{ of adult dosage.} \end{array}$$

The prescription for nembutol is as follows:

R

Mrs. Gooch,
420 Tweedledee St.,
Toronto.
Nembutol caps. Gr. $1\frac{1}{2}$.
Mitte 6.

Sig.:—Take one capsule at bedtime and one capsule a half hour before appointment.

J. ZILCH, D.D.S.

It is felt that if the patient takes a capsule the night before the operation he will be assured of a good night's sleep and will be in a much better condition than if he loses sleep from worry.

The main disadvantage of a barbiturate is its depressant power resulting in improper co-ordination of normal faculties, to a slight degree, for an hour or two. For this reason, we must always tell the patient not to drive his own car to the office and if possible to come with a friend. Another point to remember is that a barbiturate is not an analgesic and actually, pain stimuli may be exaggerated under its influence. So to insure the best result under local anaesthesia, an analgesic such as codeine should be given along with it.

ANALGESICS

Of the many analgesics available to the profession, probably four or five stand out above the others. In general, it is better to give the patient a prescription for whatever drug we wish him to take. The psychological

effect is usually favourable. If we tell him to take a couple of aspirin, the chances are that he will not bother but will rather go home and take a tablet that he received from his doctor at an earlier date. On the other hand, if he is given a prescription for acetylsalicylic acid he will not know what he is getting and will follow instructions more rigidly. Some dentists hand a patient envelopes of drugs,—a very admirable idea except that it all helps to increase the overhead unnecessarily. There is one exception to this feeling which will be discussed later.

Acetylsalicylic Acid and Phenacetin:

—These are two of the stand-by analgesics and they certainly have their place in the control of minor pain. They may be prescribed separately in 5 gr. doses or better still, may be combined. Even though it is not required, a prescription is felt to be of value. These drugs have little or no effect in therapeutic doses (5-15 gr.) upon the cardio-vascular, respiratory, urinary or gastro-intestinal systems.

Codeine:—The most practical opium derivative for use in dentistry is codeine. Its analgesic effect is generally reasonably pronounced and its toxic side effects are greatly less than its morphine brethren. Perhaps its main disadvantage is its constipating action.

Codeine may be used alone in doses of $\frac{1}{4}$ —1 gr. and often will give relief from dental pain for several hours. It may be combined with caffeine or with aspirin or phenacetin. This latter combination is very good and seems to enhance the properties of each drug.

R

T. T. Codeine Phosphate 60 mg. (gr. $\frac{1}{2}$)
mitte 12

R

C. T. Phenacetin .3 gm. (gr. 5)
mitte 12

Sig.: Take one tablet of each q. 4. h. for pain.

(T. T. stands for triturated tablet and C. T. compressed tablet. The bracketed grains are purely explanatory and would not be included in the prescription. It is important that the label be expressed clearly so that there is no doubt of the directions, Where possible, a prescription should be written in the presence of the patient as he realizes that it is for him only and it increases his confidence.)

One of the reasons for failure with codeine is that we fail to prescribe a dose large enough. For most pain $\frac{1}{4}$ gr. is not sufficient. The average person can take 1 gr. with no side effects.

Demerol:—This is a fairly new analgesic drug synthesized in Germany in 1939. It possesses practically all the advantages of the powerful pain killing qualities of morphine, and little if any of its disadvantages. Demerol may be used to advantage along with nembutol as a pre-medication or can be employed for post-operative pain with very good results. It has been found to be more effective than codeine in therapeutic doses and does not display depressing after effects. It is available in 50 mg. tablets administered orally.

R

C. T. Demerol 50 mg.
mitte 12.

Sig.: one tablet q.4.h. for pain.

(*label:* one tablet every four hours for pain)

Heroine: Heroine is a derivative of opium and is an excellent drug combining sedative and analgesic properties. The opiates have no rival for the relief of pain, and heroine is 4 to 8 times as powerful as morphine in this respect. For severe pain as from a dry socket or sensitive preparations for nervous people it can prove invaluable. There is inclined to be a feeling of pleasant listlessness a half hour after taking the drug and a marked analgesic is present. The combination of the two makes an otherwise very difficult patient quite cooperative, and

there is no lasting effect on the central nervous system that would prevent a patient leaving the office on his own after a short appointment. Heroine, unlike morphine, does not exhibit the side actions such as nausea and constipation which are fairly common.

Perhaps the main disadvantage of heroine is that it is the drug of addiction *par excellence*. However this need not deter its use in the dental office and for a short time afterwards as the patient is given only a few of the tablets. Heroine has been removed from the U.S. Pharmacopoeia for the foregoing reason but is still available in Canada. The best way perhaps in administering the drug, is to give the patient some tablets from an office supply. It is normally given by hypodermic but works very well when given by mouth.

For Office Use.

H. T. Heroine gr. 1/12
mitte 25 (one tube)

It may be necessary to give two tablets (gr. 1/6) to men or large women to produce the desired result. It should be given on an empty stomach if at all practical.

LAXATIVES

Following any surgery in the mouth, especially when drugs have been administered, the patient is very likely to be suffering from acute constipation. This may be enhanced by the internal secretion of adrenalin from mental strain and altered diet where soft foods form the large part of each

meal. The net result may be that through a general malaise, healing is delayed and the possibility of post operative complications is greater. The list of laxatives is a large one as we all know. One of the best for acute constipation is cascara. Its action is reasonably mild and yet thorough. The prescription is as follows:

R

Elixir of cascara sagrada oz. 2

Sig.: one or two teaspoonsful at bedtime.

There are many other aspects of pharmacology in dentistry which have not been dealt with at this time. An attempt has been made to merely take out the highlights of practical uses of some of the drugs at our disposal. It would be possible to go into detail about the action of many of these drugs, but after all, these details can be read in any good modern text book on the subject. The ideal analgesic which will give us all the properties we require with no after effects probably has not been discovered. In the meantime, we do have a very satisfactory list of drugs at our finger tips which will work nicely on an ambulatory patient, and it is up to ourselves to see that we make use of them. Let us always remember that the biggest single factor that keeps people away from dental offices, is the fear of pain.

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There is increasing evidence of the fact that many dentists are neglecting children's dentistry and patients are complaining about it, as they must go to other towns or cities to get the work done. This attitude will give our profession a black mark and make our aim of preventive dentistry an empty hypocritical promise. I appeal to all members of our Association to face their responsibility and care for the children. The adult population has enough money to buy all the dentistry we can render, but we, as professional men, must spread our services to those that need it most lest we be judged later.
—Bernard C. Kingsbury in Jour. of Cal. S. D. Assoc.

After burying the hatchet, don't mark the spot.—Anon.

ANNOUNCEMENTS

Montreal Dental Club Clinic

Preparations for the 22nd Annual Fall Clinic to be held under the auspices of the Montreal Dental Club on Oct. 23-25, at the Mount Royal Hotel, are now complete. The program will consist of limited attendance clinics, a progressive clinic, essays, table clinics etc. The progressive clinic will be on Oral Surgery, conducted by Dr. S. P. Mallett of Boston. Among those presenting limited attendance clinics will be Dr. LeRoy Ennis, Dr. M. M. DeVan, both of Philadelphia, Dr. Harold Levine of New York and Dr. J. C. Flanagan of Montreal. A program will be sent upon request.

It is recommended that you make immediate hotel reservations and it is suggested that you do not place emphasis on attending the Fall Clinic in making such reservations. The following hotels, all within ten minutes walk of the Mount Royal, are listed for your convenience: Windsor, Ritz-Carlton, Queens, LaSalle, Berkeley and Ford.

M. L. DONIGAN, DIRECTOR
1414 Drummond St.

Academy of Dentistry, Toronto

The opening meeting of the 1946-47 session of this Academy will be held in the form of a Dinner Meeting at the Royal York Hotel, October 16. The speaker will be President Sydney E. Smith of the University of Toronto.

American Academy of Periodontology

The next meeting of this Academy will be held at the Thomas Jefferson Hotel, Birmingham, Alabama, October 17-19.

Greater New York Dental Meeting

This meeting sponsored by the First and Second District Dental Societies will be held in Hotel Pennsylvania December 9-13. Make hotel reservations early. A program will be mailed in November upon request.

K. NEIL DONALLY, D.D.S.,
Room 106A, Hotel Pennsylvania, New York.

Chicago Dental Society

The 1947 Midwinter Meeting of the Chicago Dental Society will be held at the Stevens Hotel, February 10-13. Officers and committeemen of the Society are planning a full scale meeting similar to those held prior to the war.

"Science, like Nature, to which it belongs is neither limited by time nor space. It belongs to the World and is of no country and no age." — Davy.

"Schoolmaster Abroad"

QUESTION:

WHAT ARE THE INDICATIONS FOR THE USE OF CATHARTICS AND WHAT ARE THE BEST CATHARTICS TO USE?

ANSWER:

By Dr. F. C. Lendrum, Department of Medicine, University of Illinois College of Medicine; as published in the *Fortnightly Review of the Chicago Dental Society as a Bulletin of the Committee on Pharmacy and Therapeutics of the University of Illinois*.

INDICATIONS FOR CATHARTICS

(1) *In chronic constipation:* The popular enthusiasm for cathartics has its roots in primitive folk-psychology. In most early tribes purgation was part of a ritualistic purification. The Freudians, accordingly, are not without some justification in attributing much of our colon fixation to a defilement complex. The obvious connotation of the expression "colonic bath," provides good evidence in favour of this psychoanalytic interpretation.

Unfortunately, obsolete scientific theories have taken up the battle where primitive superstition left the field. Forty years ago Metchnikof created the concept of "intestinal auto-intoxication." "Autointoxication" provided a handy way of explaining the aetiology of any disease the cause of which was not evident. Though modern research has completely demolished this theory, the idea has lost none of its charm for the lay minded. In fact, "autointoxication" and resultant "acidosis" have largely taken the place of Personal Devil of our grandfathers as the cause of the many ills that afflict mankind.

The radio has been the most recent accomplice in the cathartic racket.

During the past fifty years reputable periodicals have become increasingly loath to have their names associated with the advertising of quack medicines. A radio wavelength, however, has much less personality than a magazine or newspaper. It does not have a reputation to uphold. As a result, patent medicines now make up an immense proportion of radio advertising. One can hardly tune in on the latest bombing of the Ruhr without listening to a passionate appeal on "the importance of being regular," nor can one listen to "The Afternoon of a Faun" without three interruptions on "waking up the sluggish liver."

From the viewpoint of modern physiology the emptying of a distended colon is no less a reliable and automatic process than breathing rapidly when one has run a hundred yards. Alvarez has observed some perfectly normal and happy adults who get along with one bowel movement a week. Frisch has demonstrated that a group of children suffered no ill effects when their bowel movements were artificially slowed to an average of one in eleven days. Sampson Wright recounts the amazing case of a man who went for over a year without a bowel movement. Even at the end of that time he suffered from only a few symptoms commonly attributed to constipation.

When an adult who is young and intelligent enough to profit by new ideas, complains of "chronic constipation" the first thing to determine is whether he is not suffering from the delusion that two bowel movements a day are needed to protect him from such disasters as "autointoxication" or "stoppage of the bowels." A brief explanation of gastrointestinal physiology may save him from a life-

long cathartic habit. He should be informed that infrequent bowel movements require no treatment unless actual physical discomfort is involved.

When one is dealing with a patient who is over the age of 40, it is ordinarily hopeless to question his faith in the saving grace of cathartics. The patient will merely "shop around" until he finds a doctor who holds orthodox opinions as revealed by the radio. Such a patient, instead, should be directed to the mildest laxative with the least objectionable side effects. The principles that govern the physician's choice will be, first, that a single chemical substance should be preferred rather than a "shot gun" mixture, and second, that the cathartic should not be irritating to the small intestine since any actual stasis occurs in the large intestine, especially in the sigmoid.

The following are the safest cathartics for the patient obsessed with chronic constipation.

(1) Milk of magnesia, 1 ounce at bed time.

(2) Karaya gum, a heaping teaspoonful stirred in water at bed time.

(3) Bile salts, 5 grains once or twice a day.

(4) Fluid extract of Cascara Sagrada, 2 cc.

(5) Phenolphthalein, 1 to 2 grains.

(2) *Following accidental or suicidal poisoning:* In case of suicidal or accidental poisoning, as much of the poison as possible should be removed by stomach tube if the patient is seen early enough and if the poison is one which does not threaten to perforate the esophagus. (After lye, for example, a stomach tube should never be used.) The poison which has passed beyond the pylorus and cannot be removed by the stomach tube can be rapidly flushed out of the intestine if one places a full dose of a saline cathartic in the stomach before removing the tube. In the case of an

early barbiturate poisoning, for example, one can leave in the stomach 1 ounce of magnesium sulphate dissolved in 12 ounces of water. This will very quickly remove the poison remaining in the intestinal lumen, and the patient will have a very strong chance of recovering unless a lethal dose has already been absorbed into the blood stream.

(3) *For temporary relief in painful rectal conditions:* A patient who is suffering acutely from hemorrhoids or rectal fissure will experience great relief if he is treated with combination of analgesic suppositories and a lubricant cathartic. Mineral oil is the most used of the lubricant cathartics, but it is objectionable for several reasons. If used over a long time it robs the body of the oil-soluble vitamins in the diet. Furthermore, it makes hospital bed-pans hard to keep clean. Finally, it has an unpleasant tendency to leak through an unwary anal orifice. Emulsion of liquid petrolatum is much more satisfactory. It may be given in doses of a ½ to 1 ounce twice a day between meals.

(4) *For relief of post operative intestinal atony:* In a case of intestinal atony following operation, with distension and especially gas pains, three substances have been used hypodermically which are not ordinarily classed as cathartics but which none-the-less act powerfully upon the intestinal wall. These are surgical pituitrin, mecholyl, and prostigmine bromide. The most specific in its action is prostigmine bromide which is ordinarily administered in a dose of 1 cc. of a 1-2,000 solution. These substances are all somewhat hazardous, however. Decompression with the Wangenstein tube generally makes their use unnecessary.

(5) *For cleaning out the gastrointestinal tract in acute diarrhoea or food poisoning:* When something irritating to the intestine is taken in the diet, the gastrointestinal tract expresses its displeasure in the form of

diarrhoea, cramps, and vomiting. The ideal procedure in such a condition is first to flush out the offending substance with a saline cathartic (a $\frac{1}{2}$ ounce is adequate) and thereafter to soothe the irritated bowel wall with colloidal aluminium hydroxide and possibly a small amount of opium. The central problem is to make sure that one is dealing with an acute food poisoning and not with a beginning appendicitis or intussusception where catharsis might be tragic.

(6) *In treatment of intestinal worms:* One general procedure governs anthelmintic treatment with many kinds of vermifuge. Treatment is ordinarily begun in the morning on an empty stomach. In many cases it is preceded by a saline cathartic (a $\frac{1}{2}$ oz. of magnesium sulphate well diluted in water). An hour later the administration of the vermifuge is begun, (for example, 3 cc. of tetrachlorethylene in a single dose for hookworm). Then, ordinarily, three hours later a second purgation with magnesium sulphate follows. Its purpose is to rid the intestines both of the dead or narcotized worms, and also to rid the intestine of the vermifuge, which itself is almost potentially toxic. Most authorities agree in preferring the saline cathartics for use with a vermifuge, magnesium sulphate being the most used. However, sodium sulphate or sodium phosphate may be given in the same dose with equal efficiency and safety. The use of castor oil instead of salines is generally condemned (by Faust, for example) on the grounds that the castor oil makes the intestinal wall more permeable to vermifuges (which are practically all oil-soluble).

(7) *Before certain x-rays:* Cathartics are useful in removing gas from the intestinal tract before certain x-ray procedures. Gas bubbles in the large intestine are particularly troublesome in the interpretation of gall bladder x-rays, x-rays of the lumbar spine, and intravenous pyelograms.

Castor oil was formerly the usual cathartic for cleaning out the large intestine. Recently, however, the saline cathartics have been increasingly used in the same dose as with the vermifuges. Theoretically, at least, the anthracene group of cathartics should be ideal for this purpose since they act specifically on the large intestine. It is unfortunate that every one of these drugs will interfere with the absorption of the gall bladder dye or disturb the function of the gall bladder sufficiently to make their use impossible in gall bladder visualization.

(8) *For removal of an impacted x-ray barium from the large intestine:* The intestinal contents ordinarily become desiccated only in the last thirty inches of the large intestine. One is not justified in causing an up-roar in thirty feet of the gastrointestinal tract in order to relieve a stasis in the last thirty inches. Petrolatum or its emulsion administered from above and enemas or glycerine suppositories administered from below are generally effective.

CLASSES OF CATHARTIC DRUGS

(1) *The anthracene group:* This group includes aloes, cascara, rhubarb and senna. Their action is almost entirely on the large intestine. The anthracene cathartics unfortunately appear in numerous irritational combinations. The combination with strychnine is particularly deplorable. It has caused numerous cases of strychnine poisoning in experimentally inclined small children. The best of the group is probably fluid extract of cascara sagrada, average dose 2 cc.

(2) *The resinous cathartics:* This group includes jalap, colocynth and podophyllum. They are very irritating to the small intestine. To paraphrase Oliver Wendell Holmes "If they were all dumped into the middle of the ocean it would be a lot better for the human race and a lot worse for the fishes."

(3) *The saline cathartics:* The saline cathartics are not absorbed through the intestinal wall and act osmotically to hold water in the intestinal lumen. They are the most rapid cathartics that can be used with safety, acting ordinarily within a half hour. Three popular members of this group have been mentioned. There are also several flavoured effervescent saline cathartics if the patient feels that the pleasant taste justifies the extra expense. Milk of magnesia, (dose $\frac{1}{2}$ to 1 ounce) belongs chemically among the saline cathartics. Its action, however, is much slower and milder. It is probably the safest "home medicine cabinet laxative" — if there has to be such a thing!

(4) *The irritant oils:* Castor oil (dose 1 oz.) is the only member of this group in the present Pharmacopoeia. In the late Fascist Italy castor oil was used as a means of punishing political prisoners—a function for which it is admirably suited. Castor oil is responsible for the terror which many children have of medicines in general. Unless it is specifically indicated one of the saline cathartics should be preferred.

(5) *The mercurials:* For many years the most important of the mercurial cathartics, calomel (dose 1 grain) owed its popularity to the belief that it stimulated the secretion of bile by the liver. Since this theory has been completely disproved, calomel is rapidly becoming a museum specimen.

(6) *Sulphur:* Irritating, offensive, and obsolete.

(7) *Phenolphthalein:* Phenolphthalein in a dose of 1 to 2 grains is easy to take and resembles the anthracene group in its action. It is slightly inferior to cascara, however, since it may cause a very bizarre, lilac-coloured skin eruption.

(8) *The lubricant cathartics:* Liquid petrolatum (mineral oil) and emulsion of liquid petrolatum are the most important members of this group. Their uses and disadvantages have already been discussed.

(9) *The bulk cathartics:* Agar agar and Karaya gum are the most important of the bulk laxatives. They are non-irritating to the intestinal tract. They are sold in granular form and are ordinarily taken in a dose of 1 heaping teaspoonful stirred in water at bed time. Karaya gum is much used by the general public under various trade names.

(10) *Bile salts:* Though the salts of the bile acids are not ordinarily classified as cathartics they have a mild laxative action. They are particularly useful for constipation-conscious, lethargic, middle-aged patients. A dose of 5 grains may be taken once or twice a day after meals and may be continued for an extended period without harm.

(11) *Injectable preparations acting directly on the intestinal wall:* This group consists chiefly of pituitrin, mecholyl, and prostigmine. They are all to be used with great caution.

Every dental assistant can comprehend and imagine thoughts, feelings and motives, knowledge and skill and useful services other than those to which she has attained, and if, by and by, she shall succeed in reaching her present ideals, her larger life and better activities will bring to her still better powers and greater usefulness.

The dental assistant should use every means to uphold the dignity and honour of her vocation, to exact its standards and to extend its sphere of usefulness. In order that the dignity and honour of the vocation of dental assisting may be upheld, its standards exalted, its sphere of usefulness extended and the advancement of dental assisting promoted, the dental assistant should associate herself with dental assistant societies and contribute time and energy in order that these Societies may represent the ideals of the profession.

—Lucille Miller in D. Assistant

The Forum

AMERICAN MEDICAL ASSOCIATION'S ANSWER TO PROPOSED PROGRAM ON SOCIALIZED MEDICINE

by MORRIS FISHBEIN, M.D.

Abstract of an address presented at the Midwinter Meeting of the Chicago Dental Society, February 14, 1946.

President Truman, in his national health program, proposed the extension of hospitals and health centres, a program of research, an extension of public health facilities, an extension of maternal and infant care and insurance against loss of wages due to illness. With all of these proposals the medical profession sincerely agrees. We have, in fact, gone far beyond these recommendations in urging a minimum standard of nutrition, housing, clothing and recreation as fundamental to good health in any health program.

We have urged the extension of professionally competent health departments to serve every part of the United States, with the understanding that local areas shall control their own agencies. However, it is not the function of a health department to take care of the sick unless indigency or need is established.

The procedures established by modern medicine for advice to the prospective mother and for adequate care in childbirth should be made available to every woman at a price that she can afford to pay. Children should have throughout infancy proper attention, including scientific nutrition, immunization against preventable infectious diseases and the other services that are included in infant welfare. However, medicine is convinced that such services are best supplied through personal contact between mother and physician and may be provided through child care and infant welfare stations

for those who have not access to personal medical attention.

The provision of health and diagnostic centres and hospitals necessary to community needs is essential for good medical care. The federal government may aid, preferably under principles such as are included in the Hill-Burton bill, which requires that location of hospitals be directed by the need for such institutions and the ability of the community to maintain them.

We have favoured suitable hospitalization and medical service for veterans.

We urge extended, coordinated and intensified research for the advancement of medical science.

We urge a program of health education with the widest possible dissemination of information regarding the prevention and treatment of disease.

All these proposals are extensions of services now being rendered on a somewhat limited scale, since they are not equally available in all parts of the United States. The federal government can do much through grants-in-aid to the individual states to encourage a wider development of such services and an increased responsibility among local communities to provide themselves with needed preventive and curative medical services.

A program for medical care within the American system of individual initiative and freedom of enterprise includes the establishment of voluntary non-profit prepayment plans for the costs of hospitalization (such as the

Blue Cross plans) and voluntary non-profit prepayment plans for medical care (such as those developed by many state and county medical societies). The details of such insurance contracts should be acceptable to the Council on Medical Service of the American Medical Association and to the authoritative bodies of state medical associations. The evolution of voluntary prepayment insurance against the costs of sickness admits also the participation of private sickness insurance plans which meet the standards of insurance commissioners and of the Council on Medical

Service of the American Medical Association.

The Council on Medical Service of the American Medical Association is at this very time engaged in developing a nation-wide plan for the extension of prepayment insurance against the costs of illness with standards that will insure a high quality of medical care and a maintenance of those fundamental factors in medical service that are consistent with the principles of the American plan of government.—*F. Review of Chi. D. Soc.*



Dr. Arkush was taken prisoner by the Japanese at the fall of Singapore and the above is a picture of the office he used during internment in the prisoner-of-war camp in Thailand. The chair was made by Capt. Spaulding, Indian Artillery, out of bamboo with a string seat, and a cut down four gallon tin was used as a cuspidor.—*Dental Record*

Even men from this Hospital have been known to bow their heads in mute but eloquent tribute when they recall the enterprise of young William Webb Ellis, who during a game of football at Rugby School in 1823, picked up the ball and ran with it. Whether it was a fit of absentmindedness or the abandon of pure devilment we shall never know, but Guy's men were quick—indeed, they were among the first—to recognize the potentialities of this apparently innocent manoeuvre. There emerged the Rugby Football Club.—*Guy's Hospital Gazette.*

DENTISTRY IN RELATION TO CLINICAL MEDICINE

by JOHN A. KOLMER, M.D., Professor of Medicine, Temple University, Philadelphia, Pa., U.S.A.

Within recent years there has been an increasing appreciation of the important relationship between dentistry and clinical medicine. Indeed, the day is now passed when the modern dentist can afford to believe that the main relationship of oral conditions to clinical medicine is evident in those systemic diseases that may develop secondarily from foci of infection involving the teeth and gingivae. This is all the more true when it is remembered that some diseases of the tongue, buccal mucosa and gingivae are due primarily to disturbances elsewhere in the body and that certain systemic diseases may extend to and involve the mouth. Under the circumstances it has become increasingly apparent that the relationship is a much broader one and that the modern dentist indeed requires some training and experience in clinical medicine for the proper practice of his profession.

Undoubtedly, the purely mechanistic phases of dentistry have, and properly should continue to have, a place of prime importance in the education and practice of dentists, since these alone constitute specialties of great importance in relation to general health. But it appears that these should no more be permitted to engage the sole interests of modern dentists than the purely mechanistic phases of x-ray diagnosis and treatment should be the sole interest of the roentgenologist, or operations on the eye, the sole interest and training of the ophthalmologist.

Furthermore, when it is remembered that caries, faulty dentition, the absence of sufficient teeth for proper mastication and the like may in time result in gastro-intestinal disturbances, as well as changes in physiology and psychic state, it becomes apparent that the condition of the organs of the mouth has a relation-

ship to clinical medicine that the dentist is able to appreciate even better than the physician.

The important relationship of clinical medicine to dentistry is emphasized even more when it is remembered that many diseases of the oral cavity are due in fact and primarily to disturbances elsewhere in the body. This is particularly true of some types of recurrent gingivitis, stomatitis and gingivostomatitis, so likely to be treated by the dentist as purely local infections; whereas, in truth, it would appear that at least some of them are due primarily to avitaminoses, endocrine and metabolic disturbances, allergy, disturbances of the hemopoietic organs, general infections or intoxications, etc., with but secondary and relatively unimportant local infection.

Likewise not a few general or systemic diseases may have oral manifestations which the dentist should be capable of recognizing. It is true that the diagnosis of most of them is based upon manifestations other than in the mouth, but in some the oral lesions may be the only manifestations as, for example, in syphilis, sprue, anthrax and actinomycosis. Needless to state, their exact diagnosis by the dentist may be the first and only means of detection which both the laity and the medical profession cannot fail to appreciate and which emphasizes the fact that the dentist is or should be primarily a member of the healing art in its broadest and most practical sense.

No wonder, therefore, that a knowledge of clinical medicine on the part of the dentist inevitably results in closer co-operation between dentists and physicians in rendering health service on a broad basis, as well as enabling the dentist to read medical literature more profitably, to partici-

pate in public health work more intelligently and, above all, to participate more actively in consultations, an ability which at present is lacking on the part of not a few dental practitioners.

But if it is granted that the modern dentist needs to know something of clinical medicine, it is equally true that the modern physician needs to know more about the fundamentals of dentistry in relation to medicine and public health. This would enable physicians to know the simple and basic facts of dental structure and development, to recognize dental defects and disease, to consult more intelligently with dentists concerning oral pathology and to give wiser advice to patients in the prevention and treatment of dental diseases and defects.

As matters now stand most physicians have but 2 uses for dentists, namely, to detect some cases of malignancy, leukemia and the like, or to extract a tooth suspected as being a focus of infection. There is, therefore, an urgent need for the instruction

of medical students on the functional and pathologic interrelationships between stomatology and the body in general. At least the internist cannot escape a deep interest in oral abnormalities not only from the standpoint of focal infection, malocclusion, etc., but likewise by reason of the frequency with which systemic diseases have oral manifestations; the pediatrician likewise because of his or her responsibility in regard to both the deciduous and permanent dentitions since the fate of both is determined so largely by the body metabolism and especially by their environment (saliva) after they have erupted; the obstetrician, because of the effect of dental sepsis on the health of the pregnant woman, with special reference to its possible influence on the toxemias of pregnancy as well as the responsibility for maintaining normal mineral metabolism in order that the deciduous teeth may erupt with the best possible structure and with the highest possible resistance to decay.

—*Dentistry, a Digest of Practice.*

A DENTOFACIAL STUDY OF MALE STUDENTS AT THE UNIVERSITY OF MICHIGAN IN THE PHYSICAL HARDENING PROGRAM

by R. E. HUBER, B.S., D.D.S., M.S., Dayton, Ohio, and J. W. REYNOLDS, B.S., D.D.S., M.S., ANN ARBOR, Mich.

Conclusions of paper in Am. J. of Ortho. and O. Surg. Jan. 1946.

TO make these observations, 500 male students were studied at random from a selected population. This group was twice removed from the average American male population. First, any university student body is selected at least to some degree on an economic as well as a physical basis, in spite of a notable effort to remove such barriers, especially in state institutions such as this one. Second, not every male student in the University could meet the requirements of the Physical Hardening Program from

which our material was selected.

The ages of the students studied fell between the extremes of 16 and 32 years of age. The greatest frequency was 127 students at 20 years of age.

1. We found that 19.4 per cent of this sampling of the population received orthodontic treatment.

2. It was the observers' opinion that 50 per cent of those receiving orthodontic treatment had been successfully treated; 45.7 per cent of the treated students had been improved; and only 4.3 per cent of the treatment

results could be characterized as unsuccessful.

3. The average time of active treatment was thirty-two months. The average time of passive (retainer) treatment was fifteen months.

4. In this study 31.2 per cent of the students needed orthodontic treatment at the time the examination was made.

5. What constitutes a malocclusion severe enough to warrant orthodontic treatment? Any malocclusion that disturbs the patient psychologically or interferes with the occlusal function of the individual is severe enough to warrant orthodontic treatment. Our criteria for treatment of the following when they were presented in a degree sufficient to disturb the patient psychologically or interfere with the occlusal function were spacing, crowding, rotation, cross-bite, mesiodistal malrelation of the opposing dental arches, overbite, open-bite, and overjet.

6. What malocclusions do not warrant orthodontic treatment? The above irregularities when they were present in a sufficiently mild degree that they do not disturb the patient psychologically or interfere with the occlusal function.

7. We found 44 students desiring orthodontic treatment: 5 of these desired treatment because of their impaired function; the remaining 39 wanted treatment because they were not satisfied with their dentofacial appearance.

8. We found 85.1 per cent of the 94

who had terminated their orthodontic treatment were favourable toward their treatment, 12.8 per cent were unfavourable, and 2.1 per cent were indifferent.

9. Of the 500 students examined we found 8.6 per cent (43) presenting anatomically correct occlusions.

10. The frequency ratio of the various classes of malocclusion (Angle) are: 64.6 per cent (318) of the 500 students had Class I malocclusion; 4.8 per cent (24) had Class II, Division 1; 10.8 per cent (54) had Class II Division 2; 12.2 per cent (61) had Class III.

11. We were able to add nothing to the study of intraoral and extraoral habits. We found, however, that mouth breathing is associated with all dentitions from anatomically correct to the most extreme malocclusion.

12. Seventy-three per cent (365) of the 500 students studied presented some degree of crowding or spacing. Lower crowding predominated over upper crowding, while the opposite held for spacing.

13. Twenty-five per cent (125) of the 500 students had some type of cross-bite or complete buccal or lingual version.

14. The average depth of bite was found to be one-half the length of the clinical crown, with a variance from end-to-end to impingement.

15. Two and eight-tenths per cent (14) of the 500 observed presented some degree of open-bite. Open-bite was found in all classes of malocclusion.

Scientists—whether they like it or not—are forced by the circumstances of this new age to reassess their role in civilization. They are the trustees of the magnificent instrument of scientific method and of the great public domain of organized knowledge. Our complex and disordered civilization can no longer function without incorporating scientific method into the whole body politic and cultivating the domain of organized knowledge for its greatest social yield. Science must become the right hand of statesmanship.

The job of science is to put its shoulder to the wheel and help rid civilization of poverty, squalor, disease, ignorance, subjugation, and violence. Its job, in short, is to help build a science of civilization.

—Ward Shepard in Science.



Editor: M. H. GARVIN, Winnipeg
Assistant Editor: T. R. MARSHALL, Toronto

Associate Editors:

PRINCE EDWARD ISLAND:

D. T. Waye, Charlottetown

QUEBEC:

E. T. Bourke, Montreal

ALBERTA:

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NOVA SCOTIA:

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ONTARIO:

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NEW BRUNSWICK:

John E. Edgewcombe, Saint John

MANITOBA:

J. F. Morrison, Winnipeg

BRITISH COLUMBIA:

H. M. Cline, Vancouver

Editorials

THE HARD TRUTH

In the early days of the Christian church we are told that more than forty men bound themselves with an oath that they would neither eat nor drink till they had killed Paul. We are not told whether they died of starvation or whether they broke their oath but we can at least admire their determination even if not in a good cause. One thing we need in dentistry today is a band of determined men who will make up their minds that no stone will be left unturned until our Canadian Dental Profession is placed upon a sound financial footing.

The other day I read of one very strong labour union in the U.S.A. which was quoted as having a reserve of forty-seven million dollars. Compare the average amount the members of labour unions pay into their union, say three dollars a month, as compared with our dues to the Canadian Dental Association, the only organized group in Canada which can act for us in many emergencies. It would almost seem that we were prepared to let it be said of us as was said of the people in Noah's day, "and they knew not until the flood came and took them all away". In these days Canadian dentistry is facing some of the greatest problems in its history. Men everywhere are very busy, too busy. Recently a quarter of a million returned war personnel were waiting for dental appointments. Under such conditions the danger is that the quality of service may deteriorate. The same care is not given to building up a stable practice as has always been necessary. Dental education, particularly at the chair, is lost sight of. The recall list is falling by

the wayside and it will be hard to explain later why this is important when we are giving so little heed to it now. It is being pointed out to governments that there are not enough dentists and so steps may be taken which will injure dentistry. In many places before the war there were too many dentists. Many dentists were not busy. The same thing may easily happen again when the present rush is over.

Then again dentists are not making the most of their opportunities. A second operating room would greatly increase the output. Adequate auxiliary help would also greatly increase the returns. These matters should be corrected before worrying about securing more dentists. To assist in correcting these problems we require as a start a full time public relations officer for our Association who would visit all parts of Canada, consult with local dental groups and work out a plan for the mutual benefit of all. We need other full time officers as well and this cannot be accomplished on a financial shoe string.

Though not a delegate to the C.D.A. Governors' meeting held in Toronto in May, I had the privilege of sitting in at their deliberations. Some thirty-nine reports were presented. After listening to reports all day and then working on committees dealing with these reports until the small hours of the morning, then discussing the reports on the reports over a period of four days, I could not help but realize what a long distance we had travelled since our last reorganization meeting when the dues to the C.D.A. were fifty cents per annum.

This was a grand meeting splendidly conceived and organized by our capable officers, Dr. Harvey Reid as President, and Dr. Don Gullett as Secretary, but I received something of a shock when I realized that there was so much to do and yet we were not paying our way even in the undertaking of our present plans. And furthermore when it became necessary to reduce the number on the educational committee which should have been increased in the interests of all of us; when it became necessary to reduce the allotment to research and other most necessary undertakings because of our financial position, I could not help but feel that something was wrong with our vision.

I believe that the dues to our national association should be ten dollars as a minimum. Manitoba and Alberta have already voted to increase their dues to ten dollars a year *per caput* when other provinces will do likewise. However as a step towards this goal, the Board of Governors decided to ask the various provinces to raise the dues to eight dollars a year at present and as quickly as possible. This is the hard truth and it should be faced.

Another most important matter is that of a reserve fund. We have an insignificant amount in this fund and there is a great need to increase it. At any moment it may become a matter of the greatest urgency that certain work be undertaken for our profession; work requiring the full-time service

of one or more men, and involving considerable expense. Are we going to have to wait until some of the provinces obtain legislative sanction before being able to increase their dues and so be in a position to contribute to the common cause? This would be a most deplorable condition and one which should be faced, not next year, but now.

Ontario, Nova Scotia and Prince Edward Island are taking a forward step. At the annual meeting of the Ontario Board held in June, action was taken to increase the *per caput* grant to the C.D.A. from \$4.00 to \$5.00 to be effective at once and at the same time the Board decided to take steps to have the Dental Act amended so that it could take care of its financial responsibilities. At the last meeting of the Nova Scotia Dental Board and of the Prince Edward Island Board the raising of the dues from \$4.00 to \$5.00 at once, was also approved.

Much more might be said about the necessity for immediate action but let us leave the matter in the hands of you determined men in each province who will see to it that our profession is not going to suffer for want of a paltry sixty-six cents a month per member.

Unfortunately at the present time rampant optimism holds sway. That was the way the Egyptians felt previous to the seven years of famine. But in those days there existed a Joseph who laid up stores against the future foul days. Wisdom would urge us to lay up stores against the reversal of good times when this Golden Age of Dentistry passes away, which condition is sure to arrive sooner or later. When we catch up with the D.V.A. cases; when luxury goods are again plentiful; when war bonds are cashed; when the pinch of inflation is felt; when credit begins to tighten, demand for dental service will begin to wane. So I say away with this dangerous optimism; study now how to please patients and make them enthusiastic over dentistry. Watch your collections; build up a savings account; look at the future realistically; plan for the critical days ahead but above all do not let your national association down for you may need its help very greatly in the days to come.

M.H.G.

C.D.A. WAR MEMORIAL FUND

For some months the Canadian Dental Association has been carrying on a campaign to raise a War Memorial Fund for the purpose of establishing scholarships, to be made available to students in attendance at Canadian Dental Schools.

A number of the provinces have completed their task and have struck a new high in dental accomplishment. A few of the provinces are still working to reach their objective which quota was struck on a *per caput* basis for each province.

A special word of thanks should go to Dr. A. E. Chegwin of Moose

Jaw, Saskatchewan, for his splendid achievement in placing his province at the head of the list in accomplishment, collecting an amount equal to 258% of his objective. Second honours go to Dr. R. A. McIntyre of Calgary, Alberta, who collected an amount equal to 191% of his objective. Nova Scotia comes third among the provinces due to the fine effort of Dr. J. W. Dobson of Halifax, who collected an amount equal to 160% of his objective. Major L. M. Gray of New Brunswick also did a fine piece of work in bringing his province into fourth place with 151% of his objective. Manitoba also reached its objective with some to spare. We still hope to hear of brilliant success in some of the other provinces as their efforts are extending into the fall.

To all the men who worked so hard and to the officers of the Association who assisted in every way possible, we would express our sincerest thanks for their splendid cooperation in this most worthy undertaking.

M.H.G.

CANADIAN DENTAL ASSOCIATION NEWS

A Summary Report of the Annual Meeting of the Canadian Dental Association Held in Toronto May 22-25, 1946

The Board of Governors met at the King Edward Hotel, Toronto, from Wednesday, May 22, 1946, until the following Saturday at six p.m. The following were in attendance:

Official Delegates:

R. L. Pallen	British Columbia
R. A. Rooney	Alberta
L. F. Hare	Saskatchewan
H. J. Merkeley	Manitoba
Harvey W. Reid	Ontario
F. A. Blatchford	Ontario
S. W. Bradley	Ontario
G. H. Campbell	Ontario
J. A. Fortier	Quebec
J. K. Carver	Quebec
H. W. MacDonald	New Brunswick
V. D. Crowe	Nova Scotia
D. T. Waye	Prince Edward Island
PAST PRESIDENTS:—C. L. Cameron, Ottawa;	
S. A. Moore, London; A. L. Walsh, Montreal;	
M. H. Garvin, Winnipeg.	
SECRETARY:—Don W. Gullett, Toronto.	
OTHER MEMBERS:—Frank Martin, Toronto;	
T. R. Marshall, Toronto; G. de Montigny,	
Montreal; R. P. Lowery, Toronto; J. F. Giffin,	
London; J. S. Bagnall, Halifax; L.	

V. Janes, Ottawa; Col. D. S. Coons, Ottawa; E. C. Jones, New Westminster; P. G. Anderson, Toronto; G. V. Fisk, Toronto; J. F. Morrison, Winnipeg; H. A. Swales, Toronto; C. A. McCabe, Valleyfield; Harry S. Thomson, Toronto; H. M. Cline, Vancouver; H. R. McLaren, Toronto; R. R. McIntyre, Calgary; L. J. D. Fasken, Regina; H. C. Bliss, Toronto; D. J. Sutherland, Vancouver; H. L. Freeland, Calgary; H. Eaton, Halifax; A. D. A. Mason, Toronto; G. V. Tario, Pembroke; Gordon Agnew, Chengtu, China.

General Meeting

A general meeting of the Association was held on May 27 in the Royal York Hotel when Dr. Harvey W. Reid, the retiring President, presented his valedictory address which appeared in the last issue of the Journal. Several amendments to the By-laws, as approved by the Board of Governors, were adopted and a discussion period followed.

Installation Ceremony

At a luncheon held on May 29, Dr. George L. Cameron, Past-President, very capably installed the new President, Dr. V. D. Crowe,

in office. At the same time, fitting remarks were made by him in presenting the Past-President's Jewel to Dr. H. W. Reid.

Officers for 1946-47

President—V. D. Crowe, Truro, N.S.

Immediate Past-President—Harvey W. Reid, Toronto, Ontario.

Vice-President—J. A. Fortier, Montreal, P.Q.

Secretary-Treasurer—Don W. Gullett, Toronto, Ontario.

The members of the Executive for the year 1946-47 are as follows:

V. D. Crowe, Chairman; Harvey W. Reid, Ex-officio; J. A. Fortier; H. J. Merkeley; Don W. Gullett.

Necrology Report

The Committee reports with regret the loss of the following members since the last meeting: Adams, E. J., Magog, P.Q.; Berrin, Samuel, Toronto, Ont.; Bewell, H. E., Dauphin, Man.; Blackwell, Austin Claude, Toronto, Ont.; Caza, C. D., St. John, P.Q.; Cooke, Harry Martin, Kingston, Ont.; Cote, T., Montreal, P.Q.; Cragg, Major T. Edwin, Dalhousie, N.B.; Davis, John Thomas, Kingston, Ont.; Denne, Fred Arthur, Stayner, Ont.; Dickison, J. W. P., Perth, Ont.; Domont, R., Montreal, P.Q.; Dundas, Gordon Ayres, Cobourg, Ont.; Floyd, Stanley Tyser, Toronto, Ontario; Frawley, Simon Leigh, Toronto, Ont.; Freitag, Herbert Alfred, Eganville, Ont.; Gaynor, J. F., Bruno, Sask.; Gibson, Lieut.-Colonel W. J., Victoria, B.C.; Grant, John Ferguson, Durham, Ont.; Halladay, William B., Clifford, Ont.; Jebb, William Pembroke, Oakville, Ont.; Joseph, Arthur E., Windsor, Ont.; Kageyama, S., Tashme, B.C.; Lamontagne, R., Montreal, P.Q.; Langstroth, Leigh A., Saint John, N.B.; Leckie, D. G., Winnipeg, Man.; Leonard, Leo Dennis, Toronto, Ont.; Liddle, William H., Ottawa, Ont.; Maguire, J. F., Prince Rupert, B.C.; Mitchell, S. R., Revelstoke, B.C.; McIntyre, James McAdam, Ottawa, Ont.; McLaughlin, Ross Vanarnan, Napanee, Ont.; McLean, John Lorne, Havelock, Ont.; McNichol, W. C., High River, Alta.; McPhail, G. C., Saint John, N.B.; Nash, Clifford Charles, Kingston, Ont.; Oliver, Edward, Ottawa, Ont.; Pickering, A. B., Balcarres, Sask.; Picotte, P. E., Montreal, P.Q.; Plaxton, Otto George, Toronto, Ont.; Revell, J. E., Ponoka, Alta.;

Richardson, Wesley, Vancouver, B.C.; Ross, R. J., Regina, Sask.; Rowan, E. R., Vancouver, B.C.; Roy, G., Montreal, P.Q.; Russell, Daniel Edwin, Hamilton, Ont.; Sharp, J. C., Edmonton, Alta.; Summers, Albert Victor, Ottawa, Ontario; Webb, M. E., Saskatoon, Sask.; Wescott, V. D., Vancouver, B.C.; Whittaker, J. H., Vancouver, B.C.; Wilkinson, Joseph Egerton, Toronto, Ont.; Wickware, Ernest Hamilton, Smith's Falls, Ont.; Wilson, Samuel Churchill, Perth, Ont.; Wright, J. E., Castlegar, B.C.

President's Report

President Reid summarized the work of the Association during the past year emphasizing the importance of committee activities. He spoke of the difficulties members are experiencing in changing from military service to civilian practice; of the need for greater financial stability for the Association; of the scholarly men of vision, boundless energy and good judgment to be found among the members of the profession from coast-to-coast and thanked all for the splendid cooperation during his year of office.

Action on President's Report—That the dental schools be urged to arrange short ten day courses for Retired Dental Officers; that arrangements be made to increase the income of the Association substantially; that the Council on Dental Education proceed in its work as rapidly as possible, and an expression of thanks to the President for his year of excellent services was tendered.

Secretary's Report

The report of the Secretary dealt with the following matters:

1. Continuous and sustained effort is most essential for the betterment of dentistry.
2. The need for the publication of an accurate list of members.
3. The establishment of a division of dental health in the Department of National Health during the past year.
4. The organization of dental treatment services for ex-service personnel under the Department of Veterans' Affairs.
5. The increased use of the facilities of C.D.A. Headquarters by officials.
6. The rapidly rising costs of dental equipment.

7. The results of the recent economic survey of Canadian Dentistry.
8. The necessity for setting high objectives.
9. Several other routine matters.

Recommendation was made that a list of members arranged by provinces should be published; that information re incomes of dentists be made available; that the present system of distributing information be continued; that sufficient clerical assistance be provided the Secretary's office and that visitations of

the executive officers be made wherever feasible.

Treasurer's Report

The report of the Treasurer showed that the Association expenditures exceeded the provincial grants during 1945 by over one thousand dollars. It was also pointed out that expenditures for the current year up to April 30 were considerably in excess of those for the same period in the previous year.

The budget for 1946 was drawn with a deficit of \$1,640.91.

FINANCIAL STATEMENT FOR 1945 CANADIAN DENTAL ASSOCIATION

Balance Sheet, December 31, 1945

ASSETS

CURRENT ASSETS:

Cash on hand and in bank:

General Account	6,457.59	
Committee on Procurement, Assignment and Rehabilitation	19.45	
Dental Research Committee	119.74	

6,596.78

Dominion of Canada Bonds, 3%, due October 1, 1963

16,000.00

Interest Accrued on Bonds

120.00 22,716.78

FIXED ASSETS:

Office Furniture and Fixtures

915.13

Less Reserve for Depreciation

242.95 672.18

\$23,388.96

LIABILITIES

Dental Research Committee

2,000.00

Surplus

21,388.96

\$23,388.96

AUDITORS' CERTIFICATE

We have audited the accounts of the Canadian Dental Association for the year ended December 31, 1945, and report that, in our opinion, the above Balance Sheet is properly drawn up so as to exhibit a true and correct view of the financial position of the Association as at December 31, 1945, according to the best of our information and the explanations given us, and as shown by the books.

THORNE, MULHOLLAND, HOWSON & MCPHERSON
Chartered Accountants

CANADIAN DENTAL ASSOCIATION
Revenue and Expenditure Account
Year ended December 31, 1945

REVENUE

Grants from Provincial Boards:		
British Columbia	1,576.00	
Alberta	1,112.00	
Saskatchewan	808.00	
Manitoba	980.00	
Ontario	8,000.00	
Quebec	3,568.00	
New Brunswick	416.00	
Nova Scotia	724.00	
Prince Edward Island	108.00	17,292.00
Grant, Dominion Dental Council		1,000.00
Transfer from the Committee on Publications Balance in Surplus		
Account December 31st, 1944	2,469.80	
On Account of Net Surplus, 1945 period	3,771.52	6,241.32
Interest on Bonds		320.00
Sale of Pamphlets		106.59
Sundry Revenue		5.00 24,964.91

EXPENDITURE

Grant to The Committee on Publications	4,500.00	
Secretary's Honorarium	3,000.00	
Clerical Assistance	1,602.28	
Unemployment Insurance	33.63	
Committee Expenses	1,730.50	
Officers' Expenses	1,935.11	
Annual Meeting Expenses	4,076.82	
Pamphlets and Reports	221.63	
Canadian Welfare Council, Membership	5.00	
Stationery and Office Expense	697.93	
Telephone and Telegraph	124.62	
Postage	424.87	
Depreciation, Office Furniture and Fixtures	91.51	18,443.90
		6,521.01
Less Amount transferred to credit of Dental Research Committee		
re 1945		1,000.00
Net Surplus for year		\$5,521.01

SURPLUS ACCOUNT

Year ended December 31, 1945

Surplus, December 31st, 1944	16,867.95
Net Surplus for year, brought down	5,521.01
	22,388.96
Less Additional Amount transferred to Credit of Dental Research Committee re 1944	1,000.00
Surplus, December 31st, 1945	\$21,388.96

Report of Executive Committee

There were two meetings called since the last annual meeting of the Board.

During the year consideration was given to the finances of the Association, preparation for the annual meeting, Income Tax matters, a plan for insurance, the by-laws, Federal dental health services, courses on Dentistry for Children in the Prairie Provinces, appointment of special committees on Industrial Dentistry, Auxiliary Services and Specialists & Specialization and many routine matters.

On the invitation of the Nova Scotia Dental Association, Digby was chosen as the place of the 1947 annual meeting.

All of which was approved.

Report of Finance Committee

The financial position of the Association was reviewed and it was recommended that certain funds be placed in accounts separate from the general funds and that an increased grant from the corporate members be sought. It was pointed out that the profits from the publication of the Journal should not be considered a dependable source of revenue for Association activities.

Approval was given to the report and recommendation made that the corporate members increase their grants by 100%.

Report of Committee on Publications

The report outlined specific terms or reference as follows:

- (1) To publish the Journal of the Association.
- (2) To direct the policy of the Journal.
- (3) To control the type of advertising to appear in the Journal.
- (4) To direct changes in the form or contents of the Journal.
- (5) To make appointments in connection with the Journal.
- (6) To be responsible for the financing of the Journal.
- (7) To make report at the annual meeting and such other times as requested by the Board of Governors.
- (8) To carry out any other duties which may occur from time to time in connection with the publication of the Journal.

Routine matters relating to the Journal for the year were reported respecting changes in appointments etc.

Editor's Report

The Editor reported an abundance of excellent subject matter on hand for publication. Shortage of paper is one of the greatest problems at present. He stated the need for surveys and questionnaires in order to clarify some issues facing the dental profession. In order to carry out such investigations the Association would need to employ more personnel. The Journal should contain the answers to dental problems and in order to fulfil this function an editor would need to give full time to the task.

It was agreed that the Journal should have a full time Editor as well as other additional help at C.D.A. Headquarters but such action depended upon more financial support.

French Editor's Report

(On March 1, Dr. de Montigny succeeded Dr. Thibaudeau, as French Editor.)

The Report presented several changes which had been made in the arrangement of the French Section of the Journal which now appear in the issues. Certain recommendations were made, in part, as follows:

- (1) That the C.D.A. should have a bilingual assistant at headquarters.
- (2) That more pages should be added to the French Section.
- (3) That a greater part of the advertisements should appear in the French language.

The great opportunity for the establishment of relations abroad through our bilingual Journal was pointed out. (Note: This is a most significant fact and an opportunity for The Canadian Dental Association to play a real part in international understanding which is being proven through correspondence at C.D.A. Headquarters.)

Steps are being taken to present the Association activities in the French section in order that our French speaking members may become better informed.

Recommendation was made by the Board that these suggestions be referred to the Committee on Publications for consideration.

Report of Business Manager of the Journal

The report contained the following facts:

- (1) An increase in the number issued had occurred during the year.
- (2) Reported the action of the London Dental Society of Ontario in paying for subscriptions to be sent to dentists in foreign countries in the cause of international good-will.
- (3) Effort is being made to keep the advertising and text on a fifty-fifty basis as nearly as possible.
- (4) The Journal had the best year financially in its history.
- (5) Expansion is necessary but hampered by financial support and paper supply.
- (6) The influence of the Journal is great on a world-wide basis.

Report of Military Committee

Available information respecting the setting up of the peace-time establishment for the Canadian Dental Corps was given. The consensus of opinion appeared to be that neither the proposed pay and allowances nor condition of service were such as to attract many dentists. Further negotiations are to take place.

The following data, as prepared by the Canadian Dental Corps was submitted:

Officers

Total number of Officers Appointed	1,519
(Brigadiers—1; Colonels—5; Lt. Colonels—58; Majors—352)	
Total number of Retirements to date	981
Total number of Officers still Overseas ..	75
Total number of Officers in Canada	385
(Of this number approximately 100 are in Depots awaiting retirement)	
Total number of Officers with Overseas Service	642

Theatres of Service

United States, North Africa, Holland, South Pacific, Bermuda, Egypt, Belgium, Ceylon, Jamaica, France, United Kingdom, Kiska, Iceland, Italy, At sea, Annette Island, India, Germany, Hong Kong, Okinawa, Newfoundland.

An effort is being made to form a dental record system which will be uniform and of

such a nature that useful data will be available.

Recommendation was made that the Military Committee be discontinued and a committee to work jointly with the different departments of the government administering health services be set up.

The Board concurred in the following observation after study of the report:

During the war the Canadian Dental Corps achieved a high standard of Dental Service to the Armed Forces, and with the backing of the Canadian Dental Association, attained a place of importance among the Military Health Services that is the pride of the profession. Undoubtedly it is the desire of the Association that this position of pre-eminence be maintained in any peace-time service in which the Corps may be involved.

For this reason your Committee views with alarm the opinion expressed by the Military Committee to the effect that the pay and allowances offered to the peace-time personnel of the Corps would not attract sufficient numbers of the younger and more progressive type of dentists, and, that the conditions of service as applied to senior administrative officers appear to be unacceptable to the great majority of the senior officers now serving with the Corps.

From these sombre facts your Committee feels that there is an urgent need for the continuance of an active and aggressive Committee to deal with these matters at a high level of authority within the Government, in an effort to obtain the objectives of the Association with regard to the Canadian Dental Corps peace-time services.

In addition to the problems allotted to the Corps it is considered that other problems may develop from time to time in the expanding dental services of the other Federal Departments named by the Chairman. It is felt that these matters would naturally come under the scope of this Committee.

Your Committee notes with pleasure the degree of cooperation that prevails between the Director General Dental Services and the present Committee.

As recommended, the Military Committee was dissolved and a new Committee to be

named "The Dental Services Committee" was set up to consist of five members of the Canadian Dental Association and that one representative of each of the Dental Services of the Department of National Defence, Department of Veterans Affairs and the Department of Health and Welfare be united to act in a liaison capacity with the committee.

Report of Program Committee

The report contained the complete arrangements in detail for the National Convention of Canadian Dentists May 27-30, 1946. Much time was spent by the committee in not only preparing for the current convention but in preparing a plan which may be applicable in whatever province the convention is held. The overall convention plan in the main is based on three primary considerations, (1) The plan and function of committees, (2) The budget, (3) The program; the whole objective being to produce an arrangement which would be fair to both the national and provincial body in the province in which a meeting is held.

Report of Committee on By-Laws

The following amendments were made by the Board of Governors and later approved by the Association at the Annual Meeting:

Constitutional By-Laws

1. That Article II Sec. I be amended to read as follows:

Article II, Sec. 1—Corporate Members shall consist of provincial statutory dental corporations which shall have been admitted to corporate membership by the Association at a duly called meeting. Continuance of membership by corporate members shall be contingent upon the payment of an annual grant satisfactory to the Board of Governors and pursuant to Clause 9 (formerly 8) of the administrative By-laws. No corporate member shall withdraw from membership except upon notice given one year in advance of the intended date of withdrawal.

2. That Article II, Sec. 2, shall read as at present as far as the word "refusal" at the end of the first sentence. That the remainder of the article be removed in total and placed as Administrative By-law Clause VI with the words "on or before December

1st next following" after the word "annually" in the first sentence. And that the present Clause VI become Clause VII and the numbering of the Administrative By-laws subsequent to be changed accordingly.

3. That Article VI, Sec. 1 (a) shall read as follows: Representation on the Board of Governors shall be apportioned as follows: each corporate member shall be entitled to appoint or elect one of its members to the Board of Governors, and shall be entitled to appoint or elect an additional representative for each additional five hundred (500) members—or major portion thereof—
4. That Article IX shall read: Amendments: The Constitutional By-laws may be amended only by the Association at a meeting of the Association, provided that a copy of the proposed amendments shall have been mailed by the Secretary-Treasurer to the Secretary of each corporate member. Any such amendment shall require for adoption the affirmative vote of two-thirds of the members of the Board of Governors and shall be ratified by the Association at its annual meeting next following by majority vote.

Administrative By-laws

5. That Clause IX (as amended) Sec. 1 shall read: The revenue of the Association shall be derived chiefly from annual grants from the corporate members; the amount of said grants shall be determined by agreement among the corporate members and shall be due on the second day of January in each year and payable on or before the 1st day of December next following.

Approved, May 27, 1946.

Report on Health Insurance

The situation in Canada was summarized by stating that any further action on the national level appeared to depend upon settling the economic arrangements between the federal and provincial governments. The carrying out of the provisions for dental treatment services for ex-service personnel has been an education to all concerned. All treatment plans, to be successful, must be preceded by proper public health activities in education and the establishment of control. Fully qualified public health dentists are essential if dentistry is to take its proper position in any plan. Dental Health

Officers should be properly qualified and function separately from actual treatment services. Re-organization is necessary in order to properly train students in dentistry to possess the body of knowledge necessary to render proper preventive treatment services for children. Effort has been made to interest graduates in the preventive field during the year. To avoid undesirable developments organized dentistry must bend every effort toward the correction of weakness in dental practice. The present situations in Great Britain, United States and South Africa, respecting health insurance legislation were outlined.

After study of the report the appointed committee presented the following statements to which the Board of Governors agreed in each instance:

Your Committee questions the advisability of instituting social services in Canada on such an elaborate and costly scale for the reason that it destroys the native initiative and independence of the individual citizen, dulling the desirable quality of his obligation to society and placing a burden on the taxpayer that is rapidly becoming unbearable.

Your Committee deplores any deviation from the original plan for Federal Administration of health services because any change will be less efficient.

While your Committee recognizes the advantages of supplementary payment by the patient for more desirable or, possibly, better type of service, it also realizes that this arrangement is susceptible to abuse and recommends that dental governing bodies consider such practices very carefully before endorsing them.

This Committee would like to emphasize the necessity for full health training for all dentists who undertake Dental Public Health Service, otherwise the dentist will not attain nor maintain his proper relative status in the Administrative part of the service.

This Committee concurs in and wishes to emphasize the idea that public education on health matters must take precedence over treatment service.

There is still ground for much study on this matter and, in particular, the obvious trend toward political domination demands careful attention.

The Committee suggests that the name of this Committee should be changed to one more properly descriptive of its present duties.

Report of Industrial Dentistry Committee

The first known attempt to set up a dental division in Industrial Dentistry was in 1887 with the health service of The Great Western Railway of England. A review of the history of the movement from that time was presented in the report. The establishment of diagnostic dental service with free choice of dentist for treatment services has proven to be the most acceptable arrangement to the profession. The report summarized the actions taken by organized dentistry in respect to the matter and submitted a statement from the Chief of the Division of Dental Health of the Department of National Health & Welfare on the subject.

After considerable study the Board of Governors concurred in the following recommendations:

PART I, *Diagnostic Services*

1. Preplacement and periodic examination of all employees with a view to early diagnosis for the elimination of disease of oral and systemic significance. X-ray examination and dental prophylaxis as aids in diagnosis are recommended.

2. Emergency service of a palliative nature is recommended.

3. The keeping of complete and accurate records is necessary.

4. Education in dental health including follow-up to encourage complete and regular dental services is necessary.

PART II, *Treatment Service*

In respect to industries desiring more than diagnostic services your Committee recommends:

- (a) That the employee should have the privilege of choosing his own dentist.

- (b) We believe better service is available through the channel of private practice in dentistry.

- (c) However, when an industry prefers a clinic type service we recommend that fair and adequate compensation be paid the dentist retained to ensure a quality service.

PART III, For the Active Operation of this Service

(a) All industrial clinics should be under the supervision of the provincial dental board concerned.

(b) All requests for the formation of Industrial Dental Services should be made by the employer or employees of the industry concerned.

(c) All proposed plans for the establishment of industrial dental service be submitted to the provincial dental board for consideration and approval before being put into operation.

(d) The best dental service can be rendered in the office of the private practitioner.

PART IV

Where and when the services of a legally qualified dental hygienist is retained this person should practise under the personal supervision of a legally qualified dentist.

Report of Auxiliary Services Committee

The report reviewed the development of auxiliary services in the practice of dentistry to date and made several statements as to policy in respect to the proper attitude and place of auxiliary services in dental practice. After study these statements were amended and the Board of Governors agreed to the following:

The Board Agrees:

1. That the problem created by the growth of the Dental Auxiliary Services and their effort to achieve recognition, is one that requires the serious consideration of the profession.
2. That the trades or callings of dental technicians, assistants, hygienists, etc., have developed over a period of years, for several reasons including:
 - (a) to permit us to give greater service to more people
 - (b) to give that service more quickly
 - (c) to give that service more economically.
3. That such auxiliary services be considered comparable to similar auxiliary services in their relationship with other professions, for example, laboratory analysts, x-ray technicians and other aides of the medical or other profession.

4. That every calling is entitled to proper remuneration and working conditions and that every calling is entitled to organize to some extent for the protection and welfare of its members.

5. That with reference to dental technicians, we believe:

- (a) that up to the present time, the great majority are fine men, proud of their work, sensible of their relation to the profession and anxious to maintain it
 - (b) that these men fear the infiltration of incompetent reactionaries just as much as dentistry does
 - (c) that, for the above reasons, they wish to have their status defined legally
 - (d) that they would prefer to have the cooperation of the profession, but, if not, are prepared to go on alone.
6. That the Association adopt as a broad principle an attitude of cooperation with responsible auxiliary services in establishing proper, equitable relationship between the profession and those services.

Report on Memorial Fund

Statement was presented that the fund had reached a total of \$6,961.50. The Association assumes the expense of collection so that the total represents the whole amount collected. The provincial chairmen were commended upon their efforts. Several provinces have over-subscribed their allotment. In other provinces the campaign has not been completed. When the campaign is finished a special study will be made as to the best use of the income from the fund for scholarship purposes.

Report of Rehabilitation Committee

Detailed statements were presented of the efforts made to assist Retired Dental Officers in re-establishing civilian practice. All authorities in control of housing etc. have been repeatedly presented with the facts relating to the difficulties experienced by our members after retirement from the military forces. Local dental societies have accomplished a great deal in alleviating many difficulties and these activities were reported. The committee was re-appointed to carry on their efforts.

Report of Research Committee

With the establishment last year of the Associate Committee on Dental Research under

which actual research can be facilitated, the committee has turned its attention to the problem of stimulating and aiding research personnel. Definite proposals for implementing this policy were submitted and concurred in by the Board. Acknowledgement with grateful thanks was made to the Dominion Dental Council for the financial assistance made to the committee.

Report of Council on Dental Education

Emphasis was placed upon the need in Canada of uniformity in dental education. The Council is stressing uniform matriculation requirements, adoption of a two year pre-dental course in a recognized Arts & Science course and an agreement as to what constitutes a minimum dental curriculum for all Canadian Dental Schools. A meeting of the Council is proposed for this fall.

Report of Committee on Dental Health and Public Relations

A study was made during the year to ascertain the status of dental and public relations activities in the different provinces. The level of effort varies considerably and it is the intention to make available to all provinces the efforts put forward by others and in this manner encourage advancement. The setting-up of a new Dental Health Division in the Department of National Health & Welfare was noted with pleasure.

The Board strongly endorsed the training of Public Health Dentists and commended the start that had been made toward this objective. The importance of preparing suitable dental health literature was emphasized and the cooperation with the new Division on Dental Health of the Department of National Health & Welfare stressed.

Report of Committee on Dental Legislation

Amendments were reported to the Quebec Act whereby an inspector to examine hygiene conditions of dental offices is provided for and provision is made to arrange for the introduction of dental hygienists under the supervision of the Dental Board as well as some other minor changes.

In Ontario the provision for the certification of Specialists was reported. British Columbia

reported some amendments of local effect only.

The Ontario Dental Technician's Act as recently passed by the Ontario Legislature was presented.

The activity of the one mail order dentistry house in Canada has ceased due to the efforts of the Quebec Board.

Reports were received at the meeting on Nomenclature Ethics, and Advisory from the respective Chairmen. Several related organizations including the Canadian Dental Research Foundation and Canadian Dental Hygiene Council reported and a presentation was made representing dental education in China.

211 Huron Street
Toronto, Ontario

DON W. GULLETT,
Secretary.

Nova Scotia Votes Increased Grant

At the meeting of the N.S. Dental Association a resolution was passed that the C.D.A. dues be increased from four dollars to five, to become effective this year.

This is the second province to make this increase since the annual meeting.

Prince Edward Island Raises Grant

"At the annual meeting of The Dental Association of Prince Edward Island held on July 15 a resolution was passed increasing the annual grant to the C.D.A. to five dollars per member effective this year."

This is the third province to make the increase from four to five dollars since the annual meeting of the Association.

Convention Notes

Many letters have been received congratulating the Convention Committee upon the Convention.

Some of these letters contain one type of comment which is significant. One said: "What a great uplift dentistry would receive in my province if we could hold such a convention out here". Another said: "The people of the city of ——— would have a great deal more respect for the dental profession if the influence of such a meeting as this one was in their midst". Several other similar remarks were received.

This brings up a point. The objective in

operating conventions has been two fold, for the most part, first to produce a good program for those attending and secondly to balance the budget and if possible show a substantial profit. The advantage of publicity and its effect upon the public has not always been properly pursued. The concept might be postulated that it would be advantageous to even operate a convention of high calibre at a loss if by so doing it proved to be an advantage to the profession as a whole and if it were the means of improving the attitude of the public toward dentistry. D.W.G.

1947 Annual Meeting

The Annual Meeting of the Board of Governors, Canadian Dental Association, will be held at The Pines Hotel, Digby, Nova Scotia, beginning Friday, June 20, 1947 at nine o'clock a.m.

1947 Convention

The National Convention of Canadian Dentists will be held in The Pines Hotel, Digby, Nova Scotia, on June 24-27, 1947. For reservations write Dr. H. S. Crosby, Birks Building, Halifax, Nova Scotia. Rooms will be allotted in the order of application.

Labor Unions — Professions

In January 1945 the position of professional engineers in respect to labour unions was discussed before the War Labour Board. It was argued that as professional engineers were employed by the industry concerned and became beneficiaries of the advantages gained by union activities they should be compelled to become trade union members. The professional engineers fought this proposed action. It was stated by the engineers that they already possessed their own organizations and neither needed nor wanted any further organization but if any alternative were forced upon them by the Labour Board they requested a separate division for members of the profession under the control of professional men and not as members of a trade union where the professional voice would be hopelessly in the minority. Labour leaders voiced the opinion rather forcibly that members of a profession were no better than any one else and

should therefore become ordinary members of the trade union. All professional organizations took an interest in this matter because professional men are increasingly becoming connected with industry. After considerable discussion action on the matter was delayed by the War Labour Board and the subject has not been re-opened up to the present date.

The employees of the City of Toronto formed a trade union some few years ago. Early this year the city council agreed to a collective bargaining and check off. Following this action each dentist on the staff of the health division (thirty-seven in number) received a letter dated June 5, 1946, demanding that he fill in an application card for membership in the union before June 30, 1946, and that he agree to abide by the laws, general and local, in accordance with the constitution and by-laws of the Trades and Labour Congress of Canada.

The dentists employed by the City of Toronto held several meetings and decided to appeal to the Board of the Royal College of Dental Surgeons. A representative delegation met the Ontario Board on June 18 last and presented their brief.

At this meeting it was stated that certain benefits could be credited to the representations of the Union, which included:

1. 10% increase of civic employee's salary.
2. Accumulated sick leave benefits.
3. Car allowance for Medical Officers and Dental Director.

It was also stated that Public Health Nurses have refused to join the Union and that the Professional Engineers employed by the City have tried to form a professional union group, but have met with no success.

A suggestion was made that it might be possible to pay fees into the Union and not become a Union member.

Members of the Dental Staff of the City Schools voiced their opinion very strongly that it was not only unethical, but an insult to a professional man to be told he must join a Union in order to serve on the Health Services of the city schools. They felt also that they could not bow to such coercion and as to compromising in paying fees, they opposed that most strongly. This action was taken by some who are on full time employment and have no established practice to fall back upon,

which stand was admired by all. Everyone who spoke opposed such a demand.

The Solicitor for the Board, who was present, agreed with the Board that strong action should be taken. It was pointed out that any member of the College who joined a trade union would violate the by-laws of the College.

An appointment was arranged for representatives of the Ontario Board to meet the Toronto Board of Control at which time the Board Solicitor presented the argument for the profession. The result was a statement given to the effect that no dentist or other professional man would lose his position by not returning a signed application on or before June 30. In the meantime negotiation with the union officials is proceeding.

Considerable importance is attached to this question. As far as is known this is the first time in Canada that union officials have attempted to force this issue and if their action were successful a precedent would be established for the rest of Canada. The issue is of paramount importance for how can a member of a profession be at the same time true to the objectives of a profession and a trade union wherein the aims are entirely different. No mistake must be made respecting the control of a profession. Dentistry went through a long struggle in order to gain independence and in all discussions respecting health plans for the future this position has been jealously safeguarded. Any loosening of this position will certainly not augur well for the future of the dental profession.

Organized medicine supported the Ontario Board in their action upon this matter. D.W.G.

Health Insurance

Any who may think that health insurance is in any way a dead issue should note the following advertisement which appeared in the daily press of July 24.

THE PUBLIC SERVICE OF CANADA

Requires an ASSISTANT DIRECTOR OF HEALTH INSURANCE STUDIES, \$6,000, for Department of National Health & Welfare, Ottawa, to assist in co-ordinating preliminary studies connected with the introduction of Health Insurance in Canada.

Report of The War Memorial Scholarship Fund to Date as of July 22, 1946.

Received from:

British Columbia	\$ 500.00
Alberta	814.00
Saskatchewan	902.00
Manitoba	500.00
Ontario	2,637.50
Quebec	1,056.00
Nova Scotia	522.00
New Brunswick	340.00
Prince Edward Island	
Interest	5.59
	\$7,277.09

Payment of Annual Fee by Members of Canadian Dental Corps

The following letter received from the Director General of Dental Services is self-explanatory.

OTTAWA, July 17, 1946.

To Dr. D. W. Gullett:

Throughout the war years, the Licensing Boards of the various Provinces of Canada, have made it possible for dental officers of the Canadian Dental Corps to retain their licenses without payment of the annual fee. This action on the part of your Board has been very much appreciated by the Canadian Dental Corps as well as by each officer individually. It has helped in the development of a fraternal spirit between dental officers and civilian practitioners in the various provinces. Our dental officers have been able to attend meetings with the feeling that they were an integral part of the dental profession; that their responsibility in the development of dentistry was not lessened because of their army association.

On October 1 it is expected that plans for the post-war Canadian Dental Corps will be completed, the Corps having been reduced to its peace-time strength at that time. This H.Q. considers it advisable that any officer wishing to retain his provincial license shall pay the license fee required by his Provincial Board after that date.

The assistance of this H.Q. will be available if it is decided that the foregoing recommendation meets with the approval of your Board.

(Signed) D. S. COONS, Colonel
Director General Dental Services.

The cooperation of the D.G.D.S., as indicated above is greatly appreciated.

NEWS FROM THE PROVINCES

MANITOBA

**Excessive Calculus Deposit**

The above picture shows a remarkable accumulation of calculus on a lower denture which was worn by an ex-navy officer. Presented by Dr. J. H. Dickson of Killarney, Manitoba.

NOVA SCOTIA

Convention of N.S. Dental Association

The 56th annual convention of this Association was held at the Nova Scotian Hotel on July 4-6.

Dr. Ross Harrington of Bridgewater, 2nd Vice-President presided due to the illness of the senior officers. Dr. W. G. McIntosh of Toronto, spoke on "The Nature of Periodontal Disease and its Treatment", also "Periodontal Case Management". Dr. C. H. Moses of Hamilton, Ont., discussed "Impressions, and the Articulation and Milling in of Dentures". Dr. J. W. Merritt, Halifax, N.S., spoke on "Sulphonamide and Penicillin Therapy". All of which proved most instructive and interesting.

Table clinics were given by the following: Dr. K. Cogle, Saint John on Zelez; Col. A. D. MacGregor, C.D.C. on Rubber Dam; Dr. J. P. McGuigan Halifax on Acrylic Crown; Dr. J. A. MacLead Truro, on Fractures and Dr. J. H. Rice, Halifax, on Full Dentures.

At the Thursday luncheon Dr. Victor Crowe, President of the C.D.A., gave a short talk on the Canadian meeting which is to be

held at the Pines Hotel, in Digby, N.S. in June, 1947.

The following officers were elected: President, Dr. J. S. Bagnall, Halifax, N.S.; 1st Vice-Pres., Dr. H. M. Eaton, Halifax; 2nd Vice-Pres. Dr. Ross Harrington, Bridgewater, N.S. To complete the Executive, Dr. L. B. Layton, Annapolis Royal. Secretary, Dr. A. Borden Haverstock. Dominion Dental Council Representative, Dr. W. C. Oxner, Halifax; Dr. John Dobson, Halifax, alternate. Canadian Dental Association Delegate, Dr. V. D. Crowe, Truro; Dr. G. M. Dewis, Alternate, Halifax.

The personnel of the Provincial Dental Board is as follows: *President*, Dr. W. H. H. Beckwith, Halifax; *Vice-President*, Dr. S. G. Ritchie, Halifax; *Drs.* M. E. Morrison, Antigonish; L. G. Israel, Sydney; *Secretary-Registrar*, G. M. Dewis, Halifax; J. H. Rice, Halifax, W. R. Fraser, New Glasgow; H. O. Harding, Yarmouth.

The Oral Hygiene Committee is composed of the following:

Drs. J. H. Rice, Halifax; J. A. Burke, Sydney; L. B. Layton, Annapolis Royal; P. S. Christie, Halifax; M. E. Morrison, Antigonish; A. W. Taylor, Yarmouth; J. Dobson, Halifax; G. M. Dewis, Halifax.

This Province has increased its *per caput* grant to the C.D.A. by \$1.00 per annum.

A resolution was adopted relative to securing a change in the dental act, which will give the Board greater disciplinary powers.

The dinner held on Friday evening, with a large attendance, including the ladies, was a great success. The speaker was Lieutenant Davies of the Canadian Navy, who was a member of the British naval commandos and took part in the successful raid on St. Nazaire. He told in a modest and dramatic way the story of that raid, and of three years as a prisoner of the Germans.

W.C.O.

Dentist Honoured

Dr. A. W. Faulkner of Halifax, ex-president of the C.D.A. has been appointed a member of the Board of Governors of Dalhousie University. So far as I am aware he is the first dentist to be so honoured.

W.C.O.

ALBERTA

Alberta Dental Association

The following officers of this Association were elected July 6: President, H. Baden Powell, Calgary; Vice-President, W. E. Addinell, Edmonton; Secretary, R. A. Rooney, Edmonton; Representative to the Canadian Dental Association, R. A. Rooney; Representative to the Dominion Dental Council, H. L. Free-land of Calgary. Also elected to the Board were C. D. Husband, Red Deer; R. Redding, Lethbridge, and Dr. Ross Gibson, Medicine Hat.

—Calgary Albertan.

SASKATCHEWAN

"Free Health Aid Extended"

Extract from Saskatchewan Government News

Regina—Free health services will be extended to incapacitated men who are heads of families receiving the provincial mothers' allowance in Saskatchewan, it has been announced by Dr. C. F. W. Hames, deputy minister of public health. About 430 men are eligible.

The free health services, which include medical, hospital, dental and pharmaceutical care, have been given to mothers and children who benefit by the provincial allowances since Jan. 1, 1945, along with old age and blind pensioners and their dependents, Dr. Hames said.

More than 25,000 persons in the province now are receiving the free health services, which includes appliances prescribed by doctors.

Moose Jaw Dental Society

This Society held a farewell meeting for Dr. W. J. McCauley who practised in Moose Jaw for over twenty years and is now moving to Sooke, B.C.

The Society presented him with a rod, reel and fishing tackle.

ONTARIO

Northern Ontario Dental Association

On August 31 this society held one of its most successful conventions, both from the standpoint of registration and the excellence of its clinicians.

The ladies in attendance took full advantage of ideal northern weather to go on a shopping spree for articles hard to obtain in the more populous southern centres. Then following a get-together luncheon at the Empire Hotel in Timmins, the ladies were conducted on a sightseeing tour of the Porcupine Mining Camp with visits to Hollinger, McIntyre and its beautiful park, Dome Mines and Buffalo Ankerite.

While registration was taking place for members and visitors in the spacious lounge of the magnificent McIntyre Community Building in Schumacher, Dr. Patrick of the L. D. Caulk Company presented approved techniques of handling amalgams, cements, silicates and zalex to a group of young ladies who are dental assistants.

The formal opening of the Convention was held in the Auditorium of the McIntyre Building, President Dr. Joseph Martin presided and welcomed members and friends to the meeting. Dr. Brill, President of the Porcupine Dental Society added his words of greeting and welcome. Following these opening exercises, Dr. Patrick presented a fine lecture clinic, complete with models and blackboard sketches dealing with oral surgery necessary for successful denture construction. He followed this with a coloured film showing the construction of Huelon acrylic crowns.

Luncheon speakers were Dr. Frank Blatchford of Fort William, a Director of the Royal College of Dental Surgeons; Dr. D. D. Wilson of Ottawa, Chief of the Dental Division of the Department of Veterans Affairs; Dr. Frank Kohli of Toronto, Director of Dental Services in the Province of Ontario; Dr. Glenn Mitton and Dr. R. P. Butler of Toronto who repre-



President JOSEPH MARTIN, D.D.S.
Timmins, Ont.

sented the Dental Public Health Committee of the Ontario Dental Association and Dr. Vin Keenan of Sudbury representing the Committee on Dental Health in Northern Ontario.

In the afternoon Dr. Chas. H. M. Williams gave a fine lecture illustrated by coloured slides dealing with the newer methods of treating periodontal disease, at the same time he demonstrated the use of the periodontal pack and stimulents.

The 1947 meeting of the Society will be held in Kirkland Lake in charge of the following officers—President, Dr. Perc Hill, Kirkland Lake; Vice President, Dr. W. R. Sommerville, Haileybury; Secretary-Treasurer, Dr. Norman Doner, Kirkland Lake and Dr. Henry Hudson, Timmins as Dental Public Health Representative.

The President's Banquet is always a highlight of the meeting and this year was no exception. Beautiful surroundings in the McIntyre Building, northern hospitality, good

food, good company in a gay mood are a fine setting for a good time. Add to this a travelogue of the North by Dr. Charles Williams with his coloured movies; a short address by the popular Dr. Graham Lane, Medical Director of Porcupine Health Unit dealing with the dental health achievements in the area and finally a dance. What a program to pack into one day! And each year it gets better.

BILL

An Act Respecting Dental Technicians

His Majesty, by and with the advice and consent of the Legislative Assembly of the Province of Ontario, enacts as follows:

1. In this Act,—

(a) "Board" shall mean Governing Board of Dental Technicians;

(b) "dental technician" shall mean any person who upon the prescription or orders of legally qualified dentists or physicians makes, produces, reproduces, constructs, furnishes, supplies, alters or repairs any prosthetic denture, bridge, appliance or thing to be used in, upon or in connection with any human tooth, jaw or associated structure or tissue, or in the treatment of any condition thereof; and

(c) "register" shall mean register under this Act.

2. *Board*.—(1) There shall be established a Board of Governors to be known as the Governing Board of Dental Technicians, to be composed of five persons to be appointed by the Lieutenant-Governor in Council.

(2) *Term of Office*.—Of the members of the Board first appointed, two shall hold office for a period of two years and three shall hold office for a period of one year, and thereafter every member appointed shall hold office for a period of two years, but any member shall be eligible for re-appointment at the expiration of his term of office.

(3) *Vacancies*.—Every vacancy on the Board caused by the death, resignation or incapacity of a member may be filled by the appointment, by the Lieutenant-Governor in Council, of a person to hold office for the remainder of the term of such member.

(4) *Officers*.—The Lieutenant-Governor in Council may designate one of the members of such Board to be the first chairman, one to be the first vice-chairman and one to be the first

secretary-treasurer of the Board, and thereafter their successors in office shall be elected by the Board from time to time from amongst its members.

3. *Regulations*.—(1) Subject to the approval of the Lieutenant-Governor in Council the Board may make regulations,—

(a) providing for the admission of dental technicians to carry on business in Ontario and for the registration of all persons so admitted, including the fees payable for registration not exceeding \$25 for each person registered;

(b) prescribing the qualifications of persons so to be admitted and the proofs to be furnished as to education and good character;

(c) providing for maintaining a register of persons so admitted to carry on business and providing for the annual renewal of registration and prescribing the fees payable thereon not exceeding \$25 annually for each person registered;

(d) prescribing the discipline and control of registered technicians, including the adoption and enforcement of any reasonable canons of ethics;

(e) providing for the investigation of any complaint that a dental technician has been guilty of misconduct or displayed such incompetence as to render it desirable in the public interest that his registration should be cancelled or suspended;

(f) providing for the cancellation or suspension of the registration of any person found by the Board to be guilty of misconduct or to have been incompetent;

(g) defining "misconduct" for the purpose of this section and the regulations;

(h) providing for the payment of reasonable fees and disbursements to members of the Board in respect to the discharge of the duties of the Board; and

(i) generally for the better carrying out of the provisions of this Act.

(2) *Submission to College*.—All regulations made by the Board shall be submitted in writing to The Royal College of Dental Surgeons of Ontario not less than thirty days before being submitted to the Lieutenant-Governor in Council for approval, and any submissions on the part of the College with respect to any such regulations shall be presented to the Lieutenant-Governor in Council with the application for approval of the regulations.

4. *Designation*.—(1) Any person registered under this Act shall have the right to use the designation "Registered Dental Technician" and may describe his business as a dental laboratory.

(2) No person shall be entitled to use the designation "Dental Technician" or "Registered Dental Technician" or any other name, title, initials or description implying that he is a dental technician, unless he is registered under the provisions of this Act.

5. *Right to Practise Profession*.—Nothing in this Act or the regulations shall apply to or affect the practice of any profession or calling by any person practising the profession or engaged in the calling under the authority of any general or special Act of this legislature.

6. *Employee of Dentist*.—(1) Nothing in this Act or the regulations shall be deemed to prohibit any person from working as an employee of a legally qualified dentist, and in the course of or as the whole or a part of his duties as such employee, performing for his employer work or services of a kind ordinarily performed by a dental technician.

(2) *Performance of Work by Others*.—Nothing in this Act shall be deemed to prohibit,—

(a) a dentist within the meaning of *The Dentistry Act*;

(b) a physician within the meaning of *The Medical Act*;

(c) a hospital dispensary, university or municipal clinic acting upon the prescription or order of a legally qualified dentist or physician; or

(d) apprenticed dental technicians and other persons working as employees of a registered dental technician, from performing work or services ordinarily performed by a dental technician.

(3) Nothing in this section shall be deemed to permit any person who is not a registered dental technician to engage generally in the service of dentists or of two or more dentists in the performance of the work of a dental technician but working in the service of a firm or association of dentists practising as partners or similarly associated with one another shall be deemed working in the service of one dentist.

7. *Corporations*.—Nothing in this Act shall be deemed to prohibit any registered dental tech-

nician from carrying on business as a dental technician through and in the name of a corporation where the corporation has a registered dental technician in charge of its operations, but in such case, each of such dental technicians shall be deemed guilty of any infringement of *The Dentistry Act* or of this Act or of the regulations thereunder committed by such corporation.

8. Nothing in this Act or the regulations shall limit, alter or affect the application of any provision of *The Dentistry Act* or of any by-law made thereunder.

9. *Offences*.—Every person who, not being registered under this Act, carries on business or holds himself out as carrying on business as a dental technician or who advertises or uses or affixes any prefix to his name signifying that he is qualified to carry on business as a dental technician shall be guilty of an offence and shall incur a penalty of \$50 for a first offence, \$100 for a second offence, and \$200 for a third or subsequent offence.

10. *Proof of Registration*.—(1) In all cases where proof of registration under this Act is required to be made, the production of a printed or other copy of the register, certified under the hand of the secretary-treasurer of the Board, shall be sufficient evidence of all persons who are registered dental technicians in lieu of the production of the original regis-

ter, and any certificate upon such printed or other copy of the register purporting to be signed by any person in his capacity of secretary-treasurer of the Board, shall be *prima facie* evidence of his signature and appointment or election.

(2) The absence of the name of any person from such copy shall be *prima facie* evidence that such person is not registered according to the provisions of this Act.

(3) In the case of any person whose name does not appear in such copy, a certified copy under the hand of the secretary-treasurer of the entry of the name of such person on the register shall be evidence that such person is registered under the provisions of this Act.

11. *Entitlement to Registration*.—Any person carrying on business as a dental technician on the 31st day of March, 1946, shall be entitled as of right to registration upon applying to the Board for registration and paying the fee for registration prescribed by the registrations.

12. *Recovery of Penalties*.—The penalties imposed by this Act shall be recoverable under *The Summary Convictions Act*.

13. This Act shall come into force on a day to be named by the Lieutenant-Governor by his Proclamation.

14. This Act may be cited as *The Dental Technicians Act*, 1946.

GENERAL NEWS

Choice of Dentist in Britain

In a written statement Mr. Bevan said that under the National Health Service Bill patients would not be restricted to doctors covering the district in which they lived. It was intended to give patients the widest possible choice among practitioners taking part in the service. The details of the way in which this could be arranged must be a matter for regulations.

—Br. D. Jour.

Report of the Seventeenth Annual Meeting of the Council on Dental Therapeutics of the A.D.A.

The 17th annual meeting of this Council was held at the American Dental Association Headquarters Building April 5 and 6.

The following is a brief summary of some subjects discussed at the meeting:

Analgesia Devices

It is well known that general anaesthesia may be a hazardous procedure, and that those who use it should be properly trained. Many dentists are eminently qualified anaesthetists. However, promotional efforts for certain types of apparatus for "analgesia", a form of general anaesthesia, tend to encourage the control of this potent procedure by unqualified persons, even the patients themselves.

In order to discourage the promiscuous administration of general anaesthetics, the Council voted not to accept patient-controlled analgesia devices until such time as their safety is more adequately demonstrated. It was further decided that operator-controlled analgesia devices would be considered for acceptance with the distinct understanding that

they are to be used only by those with adequate training in general anaesthesia.

The Vitamins

For many years the Council on Dental Therapeutics has accepted brands of oil-soluble vitamins on the ground that some of them cannot be obtained from a well-balanced diet and that they influence dental health, especially the development of sound teeth and supporting structures.

At this meeting the Council voted to consider for acceptance water-soluble vitamins, particularly thiamine chloride, riboflavin, nicotinic acid and nicotinamide or mixtures containing these factors. While the water-soluble vitamins appear to have only nutritional value and may be obtained in sufficient quantities by the normal person from a well-balanced diet, it is recognized that some dental patients are not in normal health, may not be able to consume or assimilate a well-balanced diet and therefore may require added vitamins. Where it is practicable to do so, the patient's physician should be consulted.

Penicillin

Recent discoveries with regard to penicillin were discussed at length. The Council has accepted many brands of penicillin sodium and penicillin calcium. Several brands of troches are currently being considered for acceptance.

The scientific literature concerning the applications of penicillin is weak in that most of the studies reported are inadequately controlled. However, penicillin does have a place in dentistry, provided its use does not lead toward neglect or undue postponement of the essential manipulative and operative procedures.

Fluorides

A large number of products which contain fluorides and are proposed for use to prevent dental caries or to relieve hypersensitive dentine have appeared on the market during the past year. None of these products has been accepted by the Council on Dental Therapeutics, and it is the Council's understanding that very few of them have been granted licenses by the Food and Drug Administration.

Experimentation with fluoride medication by qualified scientific investigators is encouraged. However, routine dental practice is not the place for such experimentation. The

Council has partially supported the work of Knutson and Armstrong on the topical application of fluorides.

The use of fluorides is still largely experimental, and their routine application in any form by dentist or patient should be discouraged at this time, since the mechanism of their action and the full extent of their possible harmful effects are not known.

It appears that fluorine preparations may devitalize pulps if they are sealed in freshly cut dentine. The precise manner and extent to which such preparations may be applied without endangering the vitality of the pulp has not been determined.

Recently published findings indicate that the addition of sodium fluoride to dentifrices is without beneficial effect.

Evidence adequate to support the rationale of administering fluorides in the form of bone-meal preparations or other oral pharmaceutical dosage forms is lacking.

The incorporation of fluorides in public water supplies under adequate dental, medical and engineering control is being carried out in a number of cities. Their experiences will demonstrate the suitability of future application of fluorides to community waters. Present evidence would indicate a strong possibility of partially controlling dental caries by this method.

Announce Formation of Academy of Oral Pathology

Formation of the American Academy of Oral Pathology through the efforts of the Registry of Dental and Oral Pathology of the American Dental Association, Army Institute of Pathology, Washington, was announced in July.

Any dentist in good standing in the American Dental Association may request membership, provided he has had some advanced training in clinical, morphologic, or experimental oral pathology and is endorsed by two Fellows of the Academy.

Elevation to fellowship in the Academy is by examination. Candidates are required, after attaining membership, to submit evidence of training above the undergraduate level, such as post-graduate study, teaching, research activities or active association with a department of pathology of an acceptable institution.

The first annual meeting of the academy

will be held in Chicago, preceding the mid-winter meeting of the Chicago Dental Society next February.

The Carious Tooth as a Portal of Entry for Poliomyelitis:

A Progress Report

by Hans H. Reese, M.D. and John G. Frisch, D.D.S., Madison, Wisconsin.

Summary of paper in D. Digest, July, 1946

The studies of Aisenberg and Grubb demonstrate that the dental pulp can no longer be ignored as a portal of entry for poliomyelitis. Their examinations of 375 persons with polio and 394 persons without the disease, in the same age group and geographic areas (North Carolina and Baltimore), showed that the incidence of pulpal exposure was 40.97 per cent to 42.93 per cent greater in the polio patients. This variation is statistically significant because it is from 3.3 to 5.6 times twice the standard error of difference. Our findings in a relatively small number of cases (Madison) confirmed those of Aisenberg and Grubb.

The data presented in the comparisons of fluoride and non-fluoride communities are predicated upon so many contingencies that the probability of error is great. Large numbers of fluoride communities must be compared with non-fluoride communities in the same general area over long periods of time, inasmuch as all communities are not subject to similar risks of exposure.

As a result of the investigations in this field, we subscribe to the theory that the exposed dentinal tubules, exposed pulps, and root bulbs of teeth are portals of entry for the poliomyelitis virus. The rich nerve supply of the dental pulp offers a most favourable invasion point for the virus, and especially is this true if multiple carious dental lesions feed infections to the exposed nerve rootlets. We therefore make an urgent plea to parents, physicians, and dentists to support all scientific measures for the inhibition of dental caries and to seal off these invasion foci during the early summer months in the hope that the incidence of this scourge of mankind may at least be reduced.

IN MEMORIAM

Kenneth Peaker, of Toronto, Ontario, aged 71 died on July 14. He was graduated from the School of Dentistry, Royal College of Dental Surgeons in 1895. He practised with his brother Dr. E. A. Peaker until retirement in 1943. As a young man Dr. Peaker was prominent as a lacrosse player with the Toronto Tecumseh team. Dr. Peaker is survived by his widow.

three brothers, Dr. W. A. Porter, Dr. C. M. Porter (also dentists) and Dr. S. B. Porter.

Frank Martin, of Aylmer, Ontario, aged 76, died July 29. He was graduated from the Faculty of Dentistry, McGill University.

Dr. Martin is survived by his widow, two sons, two brothers and two sisters.

John Adams Shannon, of Sault Ste. Marie, Ontario, died on August 21 at the age of 82.

Dr. Shannon graduated from the School of Dentistry of the Royal College of Dental Surgeons in 1888. He began practice in Dutton, Ontario, but moved to Sault Ste. Marie in 1895. He was active in civic and religious life of his city. He served as a member respectively of the Public School Board and the High and Technical School Board; as President of the Board of Trade in 1913-14; and as Chairman of the Public Utilities Commission. He was clerk of session in Central United Church since 1925. He was an Honourary member of the Royal College of Dental Surgeons and has served as representative of District 3 on its Board of Directors from 1927-1934.

James Roy Porter, of Toronto, Ontario, aged 49, died August 21. He was graduated from the Royal College of Dental Surgeons of Ontario in 1923. After practising in Oshawa for one year, he moved to Toronto. He was a member of the Alpha Chapter of the Masonic Lodge and of St. Paul's Anglican Church, Runnymede.

Dr. Porter is survived by his widow, and

Dr. Shannon is survived by his widow, one son Dr. George L. Shannon, and three daughters, Marion, Alice and Dorothy.

Considerations sur la Carie Dentaire

par JEAN L'ARCHEVEQUE, B.A., D.D.S., Thetford-Mines, Qué.

Un mot pour définir la carie dentaire. C'est une déminéralisation des parties dures de la dent; déminéralisation veut dire élimination excessive des sels minéraux retenus par un réticulum de cellules organiques.

Des auteurs ont affirmé et prouvé que les dents se carient, se déminéralisent par l'action de micro-organismes, sous l'influence de substances présentes dans la bouche, telles que sucre, eau, hydrates de carbone, etc. Ces causes n'ont été étudiées que par les symptômes. Ces auteurs ont-ils oublié qu'il y a cause à effets et relation d'une partie (dents et carie) au tout complet (organes, glandes, os, etc.)?

Cette dépendance de la maladie des dents nous entraîne à en rechercher la cause ou les causes générales et les moyens de l'enrayer.

McCallum et Davis disent que la cause capitale de la carie dentaire est le produit de la civilisation moderne, c'est-à-dire, d'une alimentation défectueuse. On aurait mis en doute, il y a dix ans, celui qui aurait prétendu que les déséquilibres alimentaires pouvaient conduire aux maladies suivantes:

Poumons: tuberculose, pneumonie, broncho-pneumonie, pleurésie, pyothorax, etc.

Nez et Sinus: empyème, sinusite, etc.

Bouche: carie dentaire, pyorrhée, gingivite.

Yeux: cataracte, ulcération des cornées.

Tube digestif: dilatation, ulcère, can-

cer d'estomac (rare), entérite, dystrophie, stase intestinale, constipation.

Voies urinaires: calculs, urétérite.

Organes génitaux: inflammation de l'utérus, ovarite, fausse couche, naissance prématurée.

Peau: dermatite, calvitie, urticaire, eczéma.

Sang: anémie.

Glandes endocrines: hyper - hypo - thyroïdie.

Système nerveux: polynévrite.

Coeur: myocardite, atrophie, hypertrophie, oedème, péricardite.

Le docteur McCarrison affirme dans "The British Medical Journal", que "l'importance de la présence des microbes, découverte de Pasteur, a solutionné de grands problèmes pour la guérison des maladies". Nous devons considérer l'alimentation aussi importante, aujourd'hui, que la présence des microbes.

Le docteur McCarrison a expérimenté sur 2,243 rats. Il les a alimentés avec la même nourriture dont se nourrissent les classes les plus pauvres de l'Angleterre. Les mêmes symptômes furent constatés chez les animaux et les hommes. Voici en quoi consistait la nourriture de ces Anglais: pain blanc, gâteaux, biscuits faits avec de la farine blanche, beurre et margarine, thé sucré, légumes bouillis, viandes et confitures en conserve.

Je pourrais citer de nombreux auteurs qui ont prouvé, par leurs travaux, que la carie des dents et les maladies de la gencive et des tissus de la bouche sont

occasionnées presque uniquement par une alimentation erronée, dite moderne et scientifique.

Je cite le docteur Royal Lee, D.D.S., qui fut le premier à nous donner la vraie cause de la carie dentaire, dans une conférence à Marquette Dental School, en décembre 1923. Ce n'est qu'en 1927, qu'un autre dentiste, le docteur Weston Price, publie un article affirmant que, dans 95% des cas, la carie dentaire est la suite logique d'une alimentation irrationnelle et confirme les données du Dr Lee.

Je cite encore le Dr G. T. Wrench dans son livre, "The Wheel of Health", au sujet de la carie dentaire causée par l'alimentation erronée et scientifique.

Il y a aussi McCollum, Davis, le Dr McCann et tous les chercheurs sur l'alimentation. Il ne faut pas confondre la diététique, enseignement scientifique de laboratoire et l'alimentation rationnelle qui est basée sur le respect des lois de la nature, par notre instinct. Nous disons que l'homme de la civilisation moderne a perdu le sens et le guide de cet instinct naturel.

La carie dentaire, étant causée par une alimentation erronée à l'encontre des lois naturelles, voyons en quoi consiste l'erreur moderne et ce qu'on entend par aliment naturel, aliment de vie et de santé.

Le sang est formé à l'aide des aliments. Pour obtenir l'alcalinité du sang, il faudra que les aliments soient aussi alcalins. Si la nourriture est de qualité et de quantité médiocres, les globules de sang seront affaiblis, deviendront pâles et par conséquent les cellules du corps humain, qui dépendent du milieu sanguin, seront mal nourries.

Le fluide sanguin porte la vie et la santé à la cellule et en emporte la maladie et la mort. La vie de tous les êtres, depuis l'homme jusqu'aux formes les plus rudimentaires des animaux ou des plantes, dépend de leur alimentation. Vie et nourriture sont deux termes inséparables; car la vie est impossible là où l'aliment fait défaut.

La carie dentaire est donc une maladie

causée par une alimentation erronée, conséquence de notre civilisation moderne.

Tous admettent que la carie des dents n'existe à peu près pas, chez les gens non civilisés, et nos modernistes sont renversés, car, n'affirment-ils pas, que ces gens s'alimentent à l'encontre des lois de la diététique. Mais nous, nous affirmons qu'ils respectent les lois de la Nature.

Le facteur le plus important de tous les êtres vivants est le degré d'alcalinité. Il s'exprime par la lettre pH, c'est-à-dire concentration en ions hydrogénés, dont la mesure est de quantité infinitésimale. Le pH du sang varie de 7.3 à 7.5.

La salive a un pH de 6.5 à 7.5, suivant l'alcalinité ou l'acidité de la bouche; ces deux facteurs influencent le bon maintien des dents et des gencives.

Or toute substance a un pH. Le chiffre 7 détermine l'état neutre, c'est-à-dire, ni acide, ni alcalin.

Pour chaque fraction de pH au-dessus de 7, le degré d'alcalinité s'élève.

Pour chaque fraction de pH au-dessous de 7, le degré d'acidité augmente. Si le pH de la salive, qui doit être de 7.5, tombe à 6.6 par exemple, nous perdons les sels minéraux alcalins dont les glandes salivaires ont besoin pour maintenir l'alcalinité normale de la salive. Il en résultera des gencives malades, inflammées, rouges et saignantes, de la pyorrhée et de la carie dentaire.

En acceptant cet équilibre alcalin-acide, je ne veux point guérir toutes les maladies, mais les chercheurs nous assurent qu'un bon état de santé et une bonne dentition sont liés à ce facteur.

Notre alimentation doit maintenir cet équilibre dans la proportion de 80% alcalin et 20% acide. Notre organisme a besoin de cette constante. L'alimentation moderne, par la cuisson et la stérilisation, détruit complètement ou atténue cette alcalinité, en donnant un résultat de 90% acide, avec une déficience de 70%. Les obstacles au maintien du pH normal dans l'alimentation sont la cuisson, la stérilisation, la pasteurisation et la présence de produits chimiques, tels le vinaigre, le benzoate de soude, le sucre blanc, le bicarbonate de soude (soda à pâte), la crème de tartre, la saccharine,

les colorants dans le fromage, la crème glacée, le beurre, les confiseries, les essences aromatiques, l'acide phosphorique, l'acide citrique, la pectine, etc.

La cuisson des aliments est préjudiciable, parce qu'elle détruit ou atténue le complex colloïdal. Le procédé de cuisson par la vapeur sous pression est hautement recommandable.

Ce complex colloïdal, c'est le principe de vie de la nature. La graine conserve ce complex colloïdal, en attendant la germination sous terre. Des grains de blé trouvés dans les sarcophages des rois Pharaons ont été transplantés et ont germé de nouveau.

Aucun savant, aucun laboratoire ne peut fabriquer ce complex colloïdal. Ce complex colloïdal doit exister afin que s'exerce la photosynthèse. Ce complex colloïdal entraîne la faillite scientifique du laboratoire. Notre diète quotidienne doit contenir certains aliments:

<i>Oxygène</i>	<i>Souffre</i>	<i>Silice</i>
<i>Hydrogène</i>	<i>Sodium</i>	<i>Manganèse</i>
<i>Azote</i>	<i>Chlore</i>	<i>Iode</i>
<i>Phosphore</i>	<i>Fluor</i>	<i>Cuivre</i>
<i>Fer</i>	<i>Magnésium</i>	<i>Zinc, etc.</i>

Tous ces minéraux doivent être ingérés tous les jours de notre vie pour maintenir le métabolisme en rapport avec les échanges du "catabolisme" (assimilation) et de "l'anabolisme" (*désassimilation*).

Tous ces phénomènes se présentent dans une dent. La réserve alcaline des tissus épithéliaux, qui maintient la vie et la santé de la dent, par sa faiblesse ou son absence, fait place à l'acidité, qui engendrera la carie dentaire.

La dent reçoit sa vie, c'est-à-dire ses matériaux de construction qui sont surtout des sels minéraux, par voie sanguine. Si le sang n'apporte pas cette alcalinité, les tissus récepteurs de la dent (la gencive, l'épithélium et l'endothélium), vivront dans un état acide. Cette acidité occasionnera non seulement la carie dentaire, la parodontose ou pyorrhée alvéolaire, mais aussi l'ostéite après l'extraction et le saignement prononcé à la suite d'interventions dentaires. Les gencives

tendres et saignantes sont des portes ouvertes à l'infection.

Notre civilisation moderne est responsable et est en même temps la mère de la carie dentaire.

Il appartient à nos futures mamans de refaire l'instinct de leurs enfants. C'est durant la grossesse que doit s'élaborer la formation de dents saines, signe de force et de santé. La mère doit donc s'alimenter sainement. Si elle se nourrit mal, qui en souffrira, si ce n'est l'enfant?

Dans un rapport de la Ligue des Nations, "The Problem of Nutrition" (Interim Report, Vol. 1), on peut lire qu'une enquête, menée dans les pays d'Europe et d'Amérique (Canada compris), révèle une proportion de 95% des enfants, de 6 à 15 ans, qui souffrent de carie dentaire.

Le rapport du Directeur de la Santé pour la ville de Montréal démontre un état de choses presque identique.

Ceci dénote, chez nos enfants, un mauvais départ dans la vie utérine, par l'alimentation défectueuse de la mère; ou l'enfant, ayant eu un bon départ, voit ses conditions de santé compromises, après la naissance, par des circonstances défectueuses, telles l'allaitement artificiel, l'alimentation hydro-carbonée, sucre blanc, viandes cuites, biscuits, farine blanche, lait chauffé, eau stérilisée, enfin toutes des substances dénuées de complex colloïdal. L'allaitement naturel constitue le point de départ le plus parfait pour assurer des dents saines, un développement osseux normal, un cerveau équilibré, une santé parfaite.

Nos aliments, pour être sains et pleins de vie, doivent être ingérés suivant des lois. En voici quelques unes:

- 1) Trois parties de protéine, pour une partie d'hydrate de carbone.
- 2) Environ 80% alcalin et 20% acide.
- 3) Les sels minéraux: à l'état naturel ou colloïdal.
- 4) Acides aminés.

En regard, examinons l'alimentation moderne:

1) Neuf parties d'hydrate de carbone (embaumées par la cuisson, la stérilisation, la pasteurisation, les produits chimiques) contre une de protéine, (dénaturée, elle aussi, par les mêmes procédés).

2) Environ 95% acide et 5% alcalin.

3) les sels minéraux, désagregés et détruits par la cuisson.

4) acides aminés: aucune trace.

(extrait de "The Newer Problem in Nutrition".)

5) Vitamines synthétiques pour compenser les déficiences alimentaires.

A ce sujet, voici ce qu'en dit le gouvernement canadien dans la "Loi des Aliments et Drogues", (page 46, paragraphe C): "Les présentes disent expressément que l'emploi de vitamines synthétiques

dans la fabrication de farine ou de pain, offerts en vente pour la consommation, au Canada, constitue une falsification alimentaire, au sens de l'article 4 de la Loi et de ses modifications".

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340 Notre-Dame
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REVUE DES REVUES

"L'Efficacité des vernis dans la Prévention des Irritations Pulpaires, Causées par les Obturations en Silicate" par H. A. Zander et Irène Vissotzky, Tufts Dental School, Boston, Mass.

Trois vernis différents furent essayés "in vivo" sur cent dents de chiens et trente-sept dents humaines. Des cavités furent préparées, approximativement de même profondeur et de même superficie, sur les surfaces labiales de ces dents. Les cavités furent toutes obturées avec des silicates. Dans soixante-deux dents de chiens et vingt-et-une dents humaines, le fond des cavités fut enduit de vernis protecteur.

Les chiens furent tués ou les dents furent extraites à des intervalles variant d'une à quinze semaines, après la préparation et l'obturation des cavités.

Les auteurs firent l'examen histologique de ces dents. Les dents, dont les cavités avaient été enduites de vernis, montrèrent les mêmes réactions inflammatoires de la pulpe que les dents, qui avaient été obturées de silicate, sans protection. Cependant, les réactions inflammatoires étaient moins prononcées dans les dents où on avait placé du vernis

protecteur. (Journal of Dental Research, vol 25, no 3, juin 1946.) G. DE M.

"L'Usage de l'Ortho-phényl-phénol dans l'Endodontie" par P. F. Rosenstein, D.D.S., Houston, Texas.

Cent-trente quatre canaux de dents infectées furent traités avec une solution de 10% d'ortho-phényl-phénol (à base de savon d'huile de coco, pour diminuer la tension de surface du produit). Après le nettoyage mécanique du canal, cet agent était placé dans le même canal, enduit sur des pointes de papier. Dans chaque cas, une culture négative fut obtenue, après quelques applications.

L'ortho-phényl-phénol n'est pas un déodorant, mais, à plusieurs reprises, on a pu démontrer ses propriétés anesthésiques.

Des radiographies de contrôle ont montré une régénération osseuse, là où il y avait raréfaction apicale évidente. La supériorité de ce médicament sur ceux qui sont communément en usage, est établie par cette expérience. (Journal of Dental Research, vol 25, no 3, juin 1946.) G. DE M.

CHEZ NOUS ET AILLEURS

Société Dentaire des Trois-Rivières

Les élections à la Société Dentaire des Trois-Rivières, pour l'année 1946-1947, ont donné les résultats suivants: Président: le docteur Roméo Beaudry; Vice-Président: le docteur Conrad Godin; Trésorier: le docteur Réal Lambothe; secrétaire: Roland Barbeau. Les deux gouverneurs choisis pour représenter la région des Trois-Rivières, comme gouverneurs au Collège des Chirurgiens-Dentistes de la Province de Québec sont: les docteurs Robert Trudel, de Louiseville et Maurice Lafontaine, de Drummondville.

La Province d'Ontario augmente sa contribution à l' A.D.C.

Le Collège Royal des Dentistes de l'Ontario, à son assemblée annuelle (juin 1946), a décidé d'augmenter son octroi, immédiatement, à L'Association Dentaire Canadienne. Ses membres devront, à l'avenir, payer \$5.00 par année, au lieu de \$4.00.

En 1945, les 2000 dentistes de l'Ontario avaient contribué \$8000.00 à l'Association. Cette année, 2033 dentistes verseront \$10,165.00. Par cette décision, prise sans attendre les autres provinces, les dentistes ontariens veulent reconnaître le travail effectif de l'Association.

Les dentistes de l'Ontario désirent, non seulement la continuation des entreprises de l'Association, mais aussi la consolidation de fonds pour l'Association, qui permettent à cette dernière, de représenter dignement notre profession parmi les groupements professionnels similaires du pays, et d'obtenir du public la considération due à la dentisterie. Ce geste honore les dentistes de l'Ontario.

Les 20e Journées Dentaires de Paris

Le Comité des Journées Dentaires de Paris nous informe que cette importante manifestation dentaire internationale se déroulera, comme les années précédentes, dans les locaux de l'Ecole Odontotech-

nique de Paris, 5 rue Garancière, du 21 au 24 novembre 1946. Les dentistes canadiens-français sont invités à ces assises scientifiques. Les circonstances sont difficiles quant à la participation à cette réunion, mais il nous fait plaisir de constater que la vie professionnelle dentaire française reprend sa vigueur habituelle, après les années de guerre.

Cours de perfectionnement à l'Université de Pennsylvanie

Le doyen du Thomas W. Evans Museum et de l'Ecole Dentaire de l'Université de Pennsylvanie, le docteur J. L. T. Appleton, nous fait part de cours de perfectionnement, qui seront donnés, à différentes dates, au cours de l'année académique 1946-1947. Ces cours porteront sur l'Anesthésie et la Chirurgie buccale, Céramique, Prothèse Complète, Endodontie, Couronnes et Ponts, Diagnostic et Radiologie, Prothèse Partielle, Paradentose. On obtient tous les renseignements, en s'adressant au Doyen, Ecole Dentaire, Université de Pennsylvanie, 4001 Spruce Street, Philadelphie 4, Penn.

Nouvelle Publication Française

Une nouvelle revue dentaire française, MONDE DENTAIRE LIBRE, vient d'être fondée par deux dentistes, qui désirent établir un lien entre les confrères du continent européen. Après une absence de cinq années de littérature professionnelle, les fondateurs reconnaissent le bien-fondé d'une telle publication.

Ces confrères français demandent des articles traitant de chirurgie buccale, prothèse, dentisterie opératoire, pédodontie, déontologie, etc.

Ces communications peuvent être envoyées au Docteur René M. Lorient, 73 Boul. Malesherbes, Paris, France.

La Pénicilline dans la poudre dentifrice

Mille écoliers de Cleveland, Ohio, serviront de sujets pour vérifier les effets de la Pénicilline sur la carie dentaire.

Le docteur Thomas J. Hill, professeur de pathologie buccale au Western Reserve University est en charge de l'expérience.

Il y a quelques mois, un groupe de vingt étudiants de cette institution a commencé à se servir de poudre dentifrice ad-ditionnée de Pénicilline.

La flore bactérienne de la bouche de ces étudiants, qui était d'environ 72,000 bactéries, avant le début des recherches, est descendue à 300, après trois semaines d'usage de cette poudre, deux fois par

jour. L'expérience est reprise, sur une plus grande échelle.

Nécrologie

Le docteur J. Norbert Boisvert, un des plus vieux praticiens de la Province est décédé au cours du mois de juin. Le docteur Boisvert avait commencé à pratiquer en 1901 et s'était distingué dans sa profession et dans le domaine de la musique.

Nos condoléances à sa famille.

Si C'était à Recommencer Choisirais-je la Profession de Dentiste? ⁽¹⁾

Par CHARLES F. BROWN

La question n'est pas nouvelle. Des dentistes en ont souvent discuté, sans toutefois y attacher trop d'importance, puisqu'évidemment c'est envisager une hypothèse qui n'est pas dans le domaine des choses possibles. Mais si on se place d'un point de vue spéculatif, avec le but de faire le point de l'expérience acquise et d'exprimer ses vues sur l'aspect de notre profession, elle mérite vraiment d'être prise en considération.

A en juger d'après son glorieux passé, le développement et le perfectionnement de la profession dentaire dans l'avenir méritent certainement d'être envisagés avec un réel optimisme. Ces faits, ainsi que la demande croissante de dentistes, devraient encourager les meilleurs parmi nos jeunes gens et jeunes filles à choisir cette carrière. Mais un pareil pas a besoin, avant d'être entrepris, d'être considéré avec tout le sérieux possible. Les chemins de la profession dentaire sont durs. Ce n'est pas une profession pour gens somnolents qui rêvent de vastes privilèges et de faible responsabilité. Mais elle représente un large champ d'activité dans lequel une juste récompense est accordée à l'effort honnête. Celui qui croit que la dentisterie

est chose facile se trompe. Se pencher au-dessus d'un fauteuil les yeux fixés sur une dent à peu près inaccessible, pendant des heures entières, toute la journée, et pendant six jours de chaque semaine, est une tâche dure. Examinons donc quelques-uns des facteurs qui constituent l'art dentaire de nos jours.

L'une des tâches les plus ardues qui incombent au dentiste réside dans ses rapports avec les patients. La grande variété des tempéraments des personnes qui ont recours à ses services exige de lui un tact exceptionnel. Beaucoup de gens ont des dents très sensibles. D'autres ne veulent ou ne peuvent supporter même la plus faible douleur. Ils font partie, tout comme ceux qui ont des caprices ou des fantaisies de toutes sortes, du programme courant de la vie du dentiste. Pour être capable de s'en accommoder et d'aplanir toutes les difficultés, le dentiste doit posséder une compréhension approfondie de la nature humaine, et une dose inépuisable de patience.

La durée moyenne de la carrière d'un dentiste est évaluée généralement à trente ans. Mais les années réellement productives sont relativement peu nombreuses, car les premières sont con-

(1) Journal American College of Dentists (No 1, 1946.) Traduction de l'Information Dentaire, 26 juillet 1946.

sacrées à la formation de la clientèle et les dernières sont souvent handicapées par l'âge et les infirmités.

Le revenu annuel moyen, d'après une enquête réalisée en 1929, était estimé à un peu plus de quatre mille dollars. Il faut cependant se rappeler que 1929 était une année prospère. Dès l'année suivante, ce revenu commençait à descendre et, en 1937, il était évalué à moins de trois mille dollars. Si ces chiffres ne sont pas très flatteurs, ils sont cependant comparables à ceux d'autres professions. Et s'ils paraissent faibles, ils fournissent par contre à chaque dentiste un stimulant pour s'élever au-dessus de la moyenne. Comme on l'a dit: "Il y a beaucoup de place tout en haut".

Le "standing" professionnel dans la communauté est un autre facteur que le candidat dentiste doit envisager. Le dentiste a le droit d'être considéré parmi les premiers citoyens de la communauté. Sa culture, son éducation, sa compétence doivent lui procurer cette position, mais c'est par sa véritable valeur qu'il prouvera son droit à la conserver. Il doit porter de l'intérêt aux affaires civiques et soutenir les influences constructives dans sa sphère. L'homme qui déprécie sa profession ou même sa propre personne ne mérite pas de sympathie.

Les principaux aspects de la dentisterie dans l'état actuel de son développement sont techniques et biologiques. C'est le côté technique qui se développa en premier, consistant presque entièrement dans la restauration de la forme et de la fonction des dents perdues ou endommagées. Dans les débuts, ces opérations mécaniques étaient fort simples et peu nombreuses. Progressivement, des techniques nouvelles et compliquées prirent naissance, exigeant une adresse et une précision plus grandes de la part de l'opérateur et améliorant l'esthétique, la fonction et le confort du patient.

Le côté biologique de la dentisterie s'occupe du diagnostic et du traitement des maladies dans la région dentaire. Les révélations de BILLINGS et ROSENOW sur le rôle joué par l'infection focale, en tant qu'agent pro-

ducteur d'affections générales, ont étendu considérablement les obligations et la responsabilité de la profession dentaire. Cette conception de l'origine fréquente des états pathologiques fut universellement acceptée et rendit nécessaire l'inclusion, dans l'éducation dentaire, d'études sérieuses des questions médicales de base. C'est sous cet aspect que doivent être envisagés les traitements opératoires et thérapeutiques des affections de la bouche et des dents.

L'éducation de la santé publique, telle qu'elle est présentée aujourd'hui, accorde une place importante à la spécialité dentaire. On comprendra parfaitement qu'alors que les trois-quarts de la population des États-Unis n'ont pas bénéficié jusqu'ici de soins dentaires, il existe un besoin urgent d'éducation du public dans ce sens. A mesure que les résultats des dispositions actuellement en cours feront sentir leurs effets, une nouvelle ère s'ouvrira pour la profession dentaire.

Le plus important facteur susceptible de rendre la profession dentaire attrayante, c'est peut-être le dentiste lui-même. Le dentiste doit savoir se maintenir au niveau du "standing" de sa profession. Honnêteté, intégrité et sincérité sont les points cardinaux d'une pratique dentaire satisfaisante. Une personnalité qui dégage de la sympathie et montre un intérêt personnel envers les peines de ses patients est de la plus grande importance.

Si c'était à recommencer, voudrions-nous choisir encore la profession dentaire? Je le crois. Le dentiste est un serviteur de la santé publique et, à ce titre, il est à même de rendre de très grands services, même s'il exerce dans un petit coin, si reculé soit-il. L'avenir de la dentisterie en tant que service de santé nous permet d'attendre de grands développements. Lorsque le public sera pleinement conscient des conséquences de la négligence des dents et de ses effets sur la santé générale, la profession se trouvera dans un pressant besoin d'augmentation du nombre de ses membres.

L'un de nos maîtres a dit un jour: "J'ai grande confiance dans l'avenir de

l'art dentaire; l'enseignement s'améliorera de plus en plus et nous rendrons des services de plus en plus grands; l'exercice de la profession nous fera tenir par le public en estime de plus en plus haute.

Un de mes fils vient d'être diplômé par l'Ecole Dentaire, l'autre y commence ses études. Nous pouvons tranquillement recommander aux jeunes gens le choix de cette profession".

Résumé du Rapport du Comité de Dentisterie Industrielle

par C. ABERDEEN E. McCABE, Président

Le comité de Dentisterie Industrielle de l'Association Dentaire Canadienne fut organisé, le 26 mars 1946, à la demande du Dr Armand Fortier, membre du Comité Exécutif de l'A.D.C. Il se compose des Drs: Rupert A. Wheatly, Cyril Flannagan, ainsi que du Dr C. Aberdeen E. McCabe, qui en est le président.

Les recherches du comité nous portent à croire que la Dentisterie Industrielle débuta en Angleterre, en 1887, lorsque la Great Western Railway ajouta une section dentaire à son Association, déjà existante, qui donnait à ses membres des soins médicaux et chirurgicaux. La Barber Match Co. fut, en 1890, probablement la première organisation en Amérique du Nord ayant un programme dentaire pour ses employés. En Amérique du Sud, les premiers services Dentaires Industriels furent organisés par le Dr Hector Barreto à la compagnie Cia Lug Stearica S.A., en 1900, à Rio de Janeiro, Brésil; cette compagnie avait environ 300 employés; ce service existait encore en 1929.

Le rapport du comité passe aussi en revue l'histoire de la Dentisterie Industrielle au Canada, depuis l'année 1928, donnant des détails et des statistiques sur certaines cliniques Dentaires Industrielles, tel que celles d'une compagnie de papier à Grand'Mère, Québec, d'un hôpital général ainsi que d'une compagnie d'assurance et d'une industrie de produits chimiques.

Le rapport résume les rapports reçus des Régistres des diverses provinces, mentionnant en particulier le beau travail

accompli par un comité du Royal College of Dental Surgeons d'Ontario; donne des détails sur une clinique dentaire industrielle, qui existe dans une brasserie à Montréal; résume les travaux accomplis par les Drs James M. Dunning et R. M. Wells, dont le rapport coordonne ceux des comités d'Economie Dentaire de l'Association Dentaire Américaine et de Dentisterie Industrielle de la First District Dental Society of New-York City, en coopération avec la Compagnie d'assurance Métropolitaine.

Le rapport continue, en citant les principes essentiels d'un service Dentaire Industriel, tel que promulgués par l'Association Dentaire Américaine à son assemblée, à Houston, le 31 octobre 1941. Il mentionne aussi le programme minimum de Services de Santé Dentaire Industriels, adopté en 1944 par le comité Industriel du Conseil de Santé Dentaire de l'Association Dentaire Américaine. Un communiqué reçu du Dr L. V. Janes, chef de la division dentaire du Ministère de la Santé Nationale et du Bien-Etre Social ainsi qu'une copie du journal mensuel distribué par le même Ministère, à tous les industriels du Canada sont annexés au rapport.

15,000,000 de semaines de travail sont perdues annuellement, en Grande-Bretagne, directement ou indirectement attribuables à des maladies provenant de bouches septiques. Ces chiffres attribués à William H. Shipway par Wilfrid F. Bruder de New-York ainsi que d'autres d'Ernest Goldhorn de Chicago, résument

les considérations fondamentales qui justifient l'intérêt porté par l'Industrie aux Services Dentaires.

Le rapport résume les travaux de James M. Dunning de New-York et d'Henry Klein, de Bethista, qui ont prouvé scientifiquement que la Dentisterie Industrielle bénéficie, non seulement à la santé dentaire collective des employés des firmes, qui donnent des services dentaires préventifs, mais qu'en plus chacun des employés en bénéficie individuellement.

A certains membres de la profession, qui exprimaient la crainte que les programmes de Dentisterie Industrielle pourraient ouvrir la porte à la socialisation des services dentaires, Ernest Goldhorn de Chicago répondait que la Médecine Industrielle, qui a l'appui total de la médecine légalement constituée, n'est pas plus près de la socialisation aujourd'hui qu'à son origine, il y a 2 ou 3 décades. Le comité ne considère pas la dentisterie industrielle antagoniste aux principes d'Assurance Santé de l'Association Dentaire Canadienne, mais plutôt comme un supplément temporaire, qui, avec la coopération de la pratique privée, pourrait prendre soin de cette section de la population, ayant atteint l'âge limite stipulé dans le plan d'Assurance-Santé.

La Dentisterie Industrielle voit son existence continuellement mise en danger par les bouleversements économiques; jusqu'à ce qu'on ait trouvé les mesures à prendre pour éliminer ce désavantage, il semblerait qu'elle devrait être considérée uniquement comme une mesure temporaire, quoique l'on ne doit pas négliger l'opportunité de prendre part à l'inévitable expansion de tous les genres de Services-Santé, y compris ceux de la Dentisterie Industrielle.

Après une longue et sérieuse étude, le Bureau des Gouverneurs approuva à l'unanimité les recommandations suivantes:

1ère partie

SERVICES DIAGNOSTIQUES:

1 Afin de dépister, dès le début, et d'éliminer les maladies d'importance buccales et organiques, on recommande l'examen de tous les employés avant

l'embauchage et périodiquement. Pour aider au diagnostic, la prophylaxie dentaire et l'examen, au moyen de radiographies, sont recommandés.

2 Les services d'urgence, de nature palliative, sont recommandés.

3 Il est nécessaire de tenir des registres exacts et complets.

4 L'éducation en hygiène dentaire et la vérification des examens périodiques sont nécessaires, afin d'encourager les employés à se prévaloir de services dentaires réguliers et complets.

2ième partie

SERVICE THERAPEUTIQUE

Quand aux industries, désirant un service de santé dentaire plus complet que celui plus haut mentionné, le comité recommande:

(a) Que l'employé devrait avoir le privilège de choisir son propre dentiste.

(b) Nous croyons qu'en Art Dentaire les meilleurs soins peuvent être obtenus par le moyen de la pratique privée.

(c) Toutefois, lorsqu'une industrie préfère un service dentaire, genre clinique, afin d'assurer la qualité du service, nous recommandons que le dentiste soit rémunéré de façon équitable et adéquate.

3ième partie

POUR LA MISE EN ACTION DE CE SERVICE

(a) Toute clinique industrielle devrait être sous la surveillance du Bureau Provincial de Chirurgie Dentaire intéressé.

(b) Toute demande pour la constitution de Services Dentaires Industriels devrait être faite par l'employeur ou les employés de l'industrie concernée.

(c) Tous les projets en vue d'instituer un service dentaire industriel doivent être soumis au Bureau Provincial de Chirurgie Dentaire pour examen et approbation avant d'être exécutés.

(d) C'est dans le bureau du praticien privé que peuvent être donnés les meilleurs soins dentaires.

4ième partie

Lorsque les services d'une hygiéniste dentaire légalement qualifiée sont requis, cette personne devrait pratiquer sous la surveillance personnelle d'un dentiste légalement qualifié.



PAGES EDITORIALES

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397 est Boul. S.-Joseph, Montréal

LES COMITES DE L'A.D.C.

Il semble qu'un nombre restreint de nos confrères de la Province de Québec connaisse parfaitement le travail accompli par l'Association Dentaire Canadienne.

A son assemblée annuelle, on choisit, parmi les délégués officiels de chaque province, les anciens présidents et les membres en général de l'Association, des présidents de comités, qui ont le pouvoir de s'adjoindre et qui doivent étudier une question en particulier, faire des recommandations et soumettre un rapport à l'assemblée générale de l'année suivante. Les comités, ainsi formés et dont la mission est de scruter tous les aspects d'un problème intéressant la profession dentaire, sont les suivants:

Finance: Ce comité doit étudier les revenus et les dépenses de l'Association et faire des suggestions pour améliorer le bilan financier.

Exécutif: Ce comité formé du président, de l'ex-président, du vice-président, du secrétaire-trésorier et d'un délégué officiel d'une province, doit se réunir, durant l'année, réaliser les résolutions des différents comités, former de nouveaux comités, préparer les réunions générales annuelles et trouver des initiatives intéressantes, d'ordre général, pour l'Association.

Publications: Le rôle de ce comité est de présider aux destinées du Journal (esprit du Journal, impression, genre d'annonces, changements dans la présentation ou le contenu du Journal, nominations, finances, etc.). Ce comité peut aussi publier des pamphlets d'intérêt général.

Affaires Militaires: Ce comité, né de la guerre, doit veiller aux intérêts des membres de la profession dentaire enrôlés dans les forces armées et fournir à l'Association des renseignements ou des statistiques sur le service dentaire de l'armée.

Programme: Ce comité doit préparer les détails du congrès national de l'Association, qui a lieu annuellement. Ce comité s'efforce de trouver un modèle de congrès, qui s'adapte identiquement à toutes les villes, ou sera tenu le congrès.

Amendements: Ce comité étudie les changements susceptibles d'être apportés à la Constitution, aux Statuts et aux Règlements de l'Association, pour rendre celle-ci plus conforme aux buts, qui ont motivé sa fondation.

Assurance-Santé: Ce comité approfondit l'organisation de l'Assurance Santé dans les autres pays et doit trouver la solution, qui convient le mieux aux membres de la profession dentaire et aux citoyens de ce pays.

Dentisterie Industrielle: Ce comité est d'institution plutôt récente et a été formé par cette tendance, dans certaines industries, à donner à leurs employés les services dentaires, dont ils ont besoin. Ce comité doit formuler une base d'entente satisfaisante pour les employés, les compagnies et la profession dentaire.

Services Auxiliaires: Ce comité s'occupe du problème des relations entre les dentistes et leur personnel: technicien, secrétaire, hygiéniste, assistante, etc.

Mémorial: Ce comité doit organiser et mener à bien la souscription entreprise chez les membres de la profession dentaire canadienne, pour perpétuer la mémoire de ceux qui ont servi dans les forces armées du Canada, durant la guerre 1939-1945.

Réhabilitation: Ce comité, né aussi de la guerre, a la mission d'aider les dentistes licenciés de l'armée à reprendre leur pratique civile.

Recherches: Ce comité a charge de percevoir des fonds, d'orienter, d'organiser des recherches scientifiques et de faire des suggestions pour faciliter les recherches.

Education Dentaire: Comité, qui s'occupe des programmes d'études dans les cinq facultés dentaires du Canada.

Santé et Relations Publiques: Ce comité étudie les initiatives de chacune des provinces dans le domaine de l'hygiène dentaire et fournit des directives aux gouvernements, fédéral et provincial, pour le développement de la santé dentaire des populations.

Législation Dentaire: Comité, qui prend note des changements opérés dans les constitutions et règlements des Collèges de Dentistes, dans chaque province, et qui coordonne ces amendements, de façon à en faire bénéficier les différents corps dentaires du pays.

Nomenclature: Ce comité est chargé d'unifier et de définir les termes dentaires employés dans la profession, au point de vue prononciation, épellation et sens exact.

Ethique: Comité, qui doit formuler les principes, susceptibles de guider la profession dentaire dans les relations de ses membres.

Conseil: Comité, qui est appelé à étudier certains problèmes particu-

liers de la profession et qui doit aider le Comité Exécutif dans des décisions importantes.

Relations Internationales: Comité, qui doit représenter et faire connaître la profession dentaire canadienne, au milieu de groupements analogues dans d'autres pays.

Spécialisation: Comité, qui doit approfondir les problèmes suscités par le choix d'une spécialité par les membres de l'Association, et établir des règles pour délimiter et règlementer ces spécialités.

Nécrologie: Ce comité, dirigé par le Secrétaire, dresse une liste de tous les membres décédés, durant l'année et ces noms sont lus à l'assemblée générale, qui garde deux minutes de silence, à la mémoire de ces disparus.

Nomination: Ce comité doit choisir les membres des différents comités.

Les Rapports de ces comités sont présentés à l'assemblée générale, ou est formé un comité chargé d'étudier chaque rapport en particulier et d'offrir des considérations sur le rapport.

Le président sortant de charge, le secrétaire, le trésorier, les rédacteurs et le gérant d'affaires du Journal présentent de plus, à cette assemblée générale, des rapports au sujet de leurs activités respectives durant l'année, qui vient de s'écouler, rapports, qui sont aussi étudiés par un comité spécial.

Le travail accompli par l'Association au profit de ses membres est des plus fructueux et est organisé de façon à donner un rendement efficace.

G. DE M.

CORRECTION

Dans la page éditoriale de la livraison d'avril, le rédacteur a oublié que le docteur Philippe Hamel, de Québec, avait été le premier rédacteur de la Section française du Journal de l'Association Dentaire Canadienne.

Nos excuses au docteur Hamel, qui a toujours fait grand honneur au monde dentaire canadien-français.

G. DE M.

LA PENICILLINE ET SON USAGE PAR LES DENTISTES

Le dentiste a-t-il le droit légal, et l'éthique professionnelle lui permet-il d'employer la pénicilline pour le traitement de ses patients? A cette question, M. Charles Brind, membre du Conseil du Département d'Education de l'Etat de New York, répond: "Il n'y a rien d'écrit qui empêche le dentiste de se servir de méthode ou de moyen reconnu comme traitement des affections de la cavité buccale, remèdes, opérations, etc. Cela veut dire, comme je l'entends, que les membres de la profession dentaire peuvent employer ces médicaments (sulphamidés, ou pénicilline) sous forme solide ou en injection, selon le besoin dicté par l'état de la bouche. En utilisant ces médicaments, le dentiste aura en vue leurs effets possibles, agira avec prudence et ne les recommandera pas, quant l'état du patient est incompatible avec cette médication. Mais cette distinction est affaire d'enseignement et doit venir de la profession dentaire ou peut-être de la profession médicale".

—Leo Stern, *The New York Journal of Dentistry*, juin et juillet 1946.



Photo by courtesy of City Archives, Vancouver, B.C., and Saturday Night.

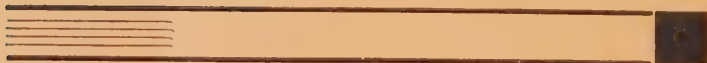
Fringed by 4,000-foot mountains and bordered by the Pacific, this aerial view of Vancouver shows the city's downtown section and part of the residential area.

● Experience of the military services during mobilization and war dictates an expansion of civilian facilities for interviewing, testing, record keeping, and counselling of young men and women. Staffs of qualified specialists such as those a few universities now maintain should be available in every educational institution to identify the most promising students and to facilitate their advancement. Incentives must be widely and plentifully supplied, and new ambitions stirred in any and all who aim at vocational targets less worthy than the best of which they are capable. — *Walter V. Bingham in Science.*



Dr. H. COLTON BLISS,
Toronto, Ontario.

President, Academy of Dentistry, Toronto.
Past President Ontario Federation of Anglers and Hunters.
Ontario Representative Canadian Conservation Association.
Graduate Faculty of Dentistry, University of Toronto, 1923.



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THE MECHANISM OF THE ACTION OF THE ANTI-INFECTIVE DRUGS*

by JOHN C. KRANTZ, Jr., Baltimore, Md., Professor of Pharmacology,
University of Maryland, School of Medicine.

THE story begins with the year 1675, when Anthony Leeuwenhoek, linen draper of Delft, took one convex lens and set it upon another and with this improvised microscope eavesdropped upon bacteria from the water in the canal. To Leeuwenhoek, this microscope was merely a curiosity, and little did he realize that within his grasp he had the foundation stones of the modern science of bacteriology. One hundred and fifty years passed, and the scene shifted from Delft, in Holland, to Vienna.

In 1845, Vienna was the Mecca of the medical world. Medical students made pilgrimages there to complete their education. As one entered the obstetrical ward in the great clinic in Vienna, an ominous sight met the eyes. Outside the ward, there were sitting scores of women in tears, for they realized that only one out of every two women who entered the doors would come out alive: the other would succumb to puerperal fever. At this time, Ignatz Semmelweis was a student in the clinic, an eager, observing student and deeply devoted to his professor of anatomy. When the latter died as the result of a dissecting wound in the arm, Semmelweis followed the body to the necropsy room and there noted the gangrenous condition of the infected arm. He saw that the lesion was similar to that

condition which he had seen so often among the mothers who had died in the obstetrical ward. From this observation, Semmelweis set forth the idea that perhaps the clinician delivering the woman was also infecting her.

The clinicians said, "Semmelweis, these things are not possible." But, undaunted, Semmelweis insisted that the infection was being carried by outside hands. After much supplication, he finally induced the chief of clinic to require of every man before delivering a woman in the clinic, that he first wash his hands in chlorine water. After this, the number of deaths in the clinic dropped in two years from 455 to 52. In spite of the results of this critical experiment, Semmelweis was doubted, and he died in despair and disappointment.

Joseph Lister, after he had risen to the position of England's greatest surgeon, visited Vienna, and some one said to him, "In yonder room Semmelweis worked on septicaemia," and Lister inquired, "Who is Semmelweis?" He had never heard of him.

In our own country simultaneously, yet independently of Semmelweis, Oliver Wendell Holmes, like a voice crying in the wilderness, was warning the medical profession, "Clean hands can carry germs." The members of the profession said to Holmes as they said to Semmelweis, "These

* Presented before the Academy of Dentistry, Toronto, March, 1946.

things cannot be". But hear the trenchant remark of Holmes, "Gentlemen, truth will survive if she is run over by a locomotive, falsehood will die if it pricks its finger." We know today that what Holmes was promulgating in this country, and what Semmelweis was advocating in Vienna stand as the foundations of the science of bacteriology.

ANTISEPTIC DRUGS IN 1900

In the year 1900, there were only four antiseptic drugs in the physician's armamentarium: iodine, which had been discovered by the French apothecary Courtois in 1811; carbolic acid, made famous by the immortal Lister; chlorine water, first used by Semmelweis, and bichloride of mercury, which had found its way into almost every clinic. One by one, the bacteria causing the various diseases had been discovered, during the years 1860-1900, and men were searching for compounds that would enter the blood stream and free it of invading organisms.

All of these compounds may be classified as protoplasmic poisons. These compounds reacted with the protoplasm of all living cells irrespective of their origin, and exhibited no specificity for invading organisms. The next step in the development of the anti-infective drugs was the search for an anti-infective drug that exhibited specificity against the invading organisms.

ARSENICALS

During his explorations in Africa, in the middle of the nineteenth century, Livingstone observed that pack animals suffered from a disease known to natives as sleeping sickness, trypanosomiasis, which we know today is related to syphilis. He injected these animals with inorganic arsenicals and published in the *Annals of Tropical Medicine*, about 1858, his

observations that the animals were benefited by this treatment.

In 1887, while working at Breslau, Paul Ehrlich, read the work of Livingstone. Ehrlich believed that he could take a poisonous metal like arsenic, mercury or silver and attach it to a dye molecule that penetrates deeply into the tissues and prepare a compound which would kill the invading organisms without injury to the host who harboured the organism. Time went on and Ehrlich worked with great zeal on this problem. In 1910, he stood before a great medical meeting and said, "Gentlemen, I have a drug which will cure a mouse and I shall make another which will cure a million men." The news of Ehrlich's work was soon known throughout the world. Men came from all over the globe to work with him, and by 1910 Ehrlich with his associates had succeeded in making 606 new compounds that had never existed before. The six hundred and sixth compound, arsphenamine, or salvarsan, cured syphilis. Ehrlich wanted to synthesize a drug which, when given in one dose, would cure the syphilitic of his disease. This aim, he never accomplished. Today, we know that the treponema develops a tolerance to the arsenicals and one must augment the arsenical treatment with mercury or bismuth, and then with potassium iodine to dissolve the gummatous tissue, in order that the arsenical or mercurial may come in contact with the treponema. However, from the public health standpoint, Ehrlich achieved his ambition, for when the syphilitic is injected with the first doses of arsphenamine or the newer mapharsen, he is rendered non-infectious as far as the rest of the community is concerned.

Mapharsen, the newest of the arsenicals, the form of the drug recommended by the armed forces in this country for combating syphilis, is far better in many respects than arsphenamine. It is capable of cur-

ing the disease in a period of seven or eight weeks instead of two years. Paul Ehrlich made this compound. He studied it, but believed it would be too toxic for general use.

Marpharsen, kills the syphilitic organism by uniting with the sulphhydryl groups of the cysteine of the glutathione which is present in the spirochete. Marpharsen, containing an oxygen atom attached to arsenic, unites this oxygen atom with two hydrogen atoms in two sulphhydryl groups in the cysteine molecule, a constituent of glutathione and the enzyme is no longer to accept oxygen. The cell therefore dies of an internal asphyxia. This was our first step in the development of specificity of anti-septic drugs. Ehrlich had developed a true treponemocide.

In 1913, Ehrlich, now a veteran, stood before a great medical congress and issued a challenge the thunder of which reverberated around the world. He seemed to realize that what he was saying would echo down through the decades. He was convinced that it was too important to couch it in his native tongue, German, so he used the universal language of science, Latin, when he asked those listening to him to produce "*magna therapia sterilisans*" a great therapeutic sterilizing agent, that should kill *streptococcus hemolyticus* in the blood stream just as his "606" killed the treponema of syphilis. Many heard the challenge. Bacteriologists, chemists and pharmacologists all over the world endeavoured to obtain this compound. In 1916, Paul Ehrlich died, without the realization of this his second dream.

MERCUROCHROME

In 1920, Young, White and Hill, of Johns Hopkins University, succeeded in making a new compound, mercurochrome, heralded by those enthusiastic advocates of Baltimore as the great blood stream sterilizing agent.

Indeed they were warranted in some of their early enthusiasm, for, in the test tube, mercurochrome showed great promise. When, however, it was injected into the blood stream, the mercury in the mercurochrome, which is attached to a carbon atom, became ionic mercury, which is nephrotoxic, and those patients who were injected with this compound often showed signs of uremic poisoning and acute nephritis.

HEXYLRESORCINOL

Prof. T. B. Johnson, of Yale, made the interesting observation that the introduction of an alkyl radical such as methyl, ethyl, propyl or butyl into the molecule of resorcinol enhanced the antiseptic value of the compound. The greater the number of atoms in the alkyl chain, the more potent the germicidal activity of the compound. On this general principle, in 1927, hexylresorcinol was made.

Hexylresorcinol was an important discovery in those days. The fatal dose of carbolic acid is between 1 and 2 gm. The phenol coefficient of carbolic acid is unity. The fatal dose of hexylresorcinol is not known. One can take 5 or 6 gm. with impunity; but the phenol coefficient of hexylresorcinol is about 40 with no toxic metallic atom in the molecule. So hexylresorcinol was injected intravenously, but was ineffective, as it is inactivated by the elements of the blood.

In 1932, phenyl mercuric nitrate was tried, but was found to be too toxic for general use.

GOLD COMPOUNDS

Gerhard Domagk followed the same line of approach that Paul Ehrlich had followed in the problem of chemotherapy. He took a series of dyes known as the trypan red dyes and attempted to introduce into those molecules a gold atom. Gold is very toxic to streptococcal micro-organisms.

Domagk made a large number of gold compounds and performed a number of experiments on mice. He infected mice with a virulent strain of *streptococcus hemolyticus* from man and observed that the mice died within three days. From their hearts' blood, he always succeeded in isolating streptococci. Then he injected organic gold compounds and the animals lived three or four weeks. After five to six weeks, however, they began to die, but, from their hearts' blood, he was unable to isolate any of the living micro-organisms. On closer examination, Domagk found that, just as in the case of mercurochrome, the gold likewise left the carbon atom and the compound became both hepatoxic and nephrotoxic, and the animals died because of the toxic nature of the metal in the dye molecule. He then left the gold out of the molecule and gave the trypan red alone, and thus kept the mice alive through their normal life span.

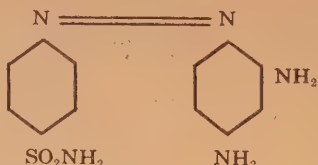
SULPHONAMIDES

While conducting these experiments, Domagk permitted Dr. Foerster, of Dusseldorf, to use some of this compound, later called prontosil, on a young child suffering from septicaemia. The day after the prontosil was administered, the child's temperature dropped precipitously and, in four days, she was apparently normal.

The news of that cure spread rapidly over Germany, into France, across the Channel into England, to Queen Charlotte's Hospital in the City of London, where much of the experimental work on prontosil took place. Visiting in London at that time, Long, of Johns Hopkins University, saw the remarkable results of the first days' use of prontosil in blood stream infections. In 1936, the substance was brought to this country, and in August of that year, it was used on the North American continent for the first time.

Prontosil, the molecule of which is

large, is a red dye with the following structure:



It was soon shown by Fuller, of Queen Charlotte's Hospital, and by investigators in France and in our own country, that, in the tissues, prontosil was split and yielded the chemical substance para-amino-benzene-sulphonamide. It was further shown that the latter substance was the portion of the prontosil molecule acting against the haemolytic streptococcus. In 1937, the Council on Pharmacy and Chemistry of the American Medical Association suggested the name sulphanilamide to replace the more cumbersome para - amino - benzene - sulphonamide. The structural formula of sulphanilamide is:



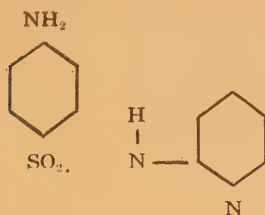
In a short time, Long and Bliss showed that sulphanilamide was effective against the meningococcus, the Welch bacillus of gas gangrene and the gonococcus.

When sulphanilamide is injected intravenously in massive doses, there is no change in respiratory rate or in depth of respiration. The blood pressure and the pulse remain practically normal. Skeletal muscle is neither stimulated to contraction nor depressed. The smooth muscle of the intestine or the uterus is not markedly affected, if at all, by rather strong concentrations of the drug. The

action of sulphanilamide does not cause thrombosis at the site of injection in the laboratory animals even in massive doses. The myocardium is not involved when sulphanilamide is present in the blood in concentrations commensurate with therapeutic doses. One therefore has in this drug a comparatively inert pharmacologic substance.

Sulphanilamide is found in the blood, cerebrospinal fluid, prostatic secretion, bile and pancreatic juice and in the urine of animals given massive doses of this drug by mouth. It is disseminated through the body fluids and tissues as water spreads through a previously wetted sponge.

In the years 1937-1938, Whitby, of England, demonstrated that a new sulphonamide compound was effective against pneumococci. This new substance was called sulphapyridine. It was made by joining pyridine, a substance derived from nicotinic acid of the vitamin B₁ complex, to the sulphanilamide molecule. The structural formula of sulphapyridine is:



Prior to the advent of sulphapyridine, the mortality rate of hospitalized pneumonia cases in London was from 25 to 30 per cent. During the first year of administration of sulphapyridine the mortality rate dropped to 7 per cent. The same results were obtained in our country. In juvenile pneumonia, in which the mortality rate is even higher than 30 per cent, with the proper use of sulphapyridine it dropped to nearly zero in many institutions.

Sulphapyridine or sulphanilamide

when added to cultures of living micro-organisms has little bactericidal action. It does not coagulate the protoplasm of bacteria as does mercuric chloride or phenol. However, in the presence of sulphapyridine, the pneumococci show modification of their capsules. From these observations, it is believed that one of the most tenable explanations for the use of sulphapyridine in the treatment of pneumonia is the fact that the capsules of the pneumococci, becoming modified, are rendered more vulnerable to the phagocytic cells of the reticulo-endothelial system.

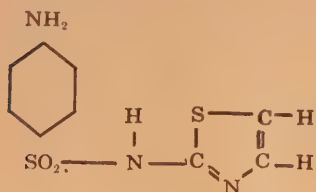
It is our belief that it is not the sulphonamide drug itself that effects the cure, but rather the sulphonamide drug in collaboration with the reticulo-endothelial system of the host. In splenectomized animals, the drugs are not nearly so effective and, in animals from which the liver has been removed, the drugs lose their effectiveness to a great degree, an indication that the activity of the drug is dependent on active phagocytosis of the host in addition to attenuation or intoxication of the micro-organisms by the drug.

When pneumococci are grown *in vitro*, as the organism develops hydrogen peroxide is formed. There is, at the same time, however, a protective mechanism elaborated by the micro-organism; namely, a catalase, which decomposes the hydrogen peroxide. If the hydrogen peroxide were allowed to become concentrated, there would be a cessation of growth of the bacteria. If one were to drop into the culture sulphapyridine or, better, sulphathiazole, the catalase would be destroyed, and thus the hydrogen peroxide would be permitted to accumulate in higher concentrations, ultimately inhibiting bacterial growth.

This appears to be one of the possibilities of the remedial action of sulphapyridine in the treatment of pneumonia.

It was observed that the use of

sulphonamide drugs often produced nausea, vomiting and blood dyscrasia. Because these side effects could frequently be offset by the administration of vitamin B₁, investigators made an effort to attach this vitamin to the sulphanilamide molecule. Vitamin B₁ is made up of essentially two groups, a thiazole and pyrimidine nucleus. The thiazole group was introduced into the basic molecule, sulphanilamide, and thus sulphathiazole, which has the following structural formula, was produced:



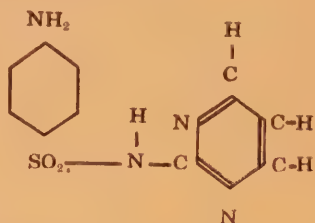
Let us consider the advantages of sulphathiazole therapy. With sulphapyridine and sulphanilamide, we have never been able to successfully combat staphylococcal infections, but, with the addition of the thiazole group to the sulphanilamide molecule, a substance was produced that is not only active against the pneumococci, but is also quite active against staphylococcal infections. It was also found that the benign action of vitamin B₁, when given to combat the intoxication induced by sulphanilamide and sulphapyridine therapy was carried along by the thiazole group.

Administration of sulphathiazole gives rise to nausea and vomiting in about 30 per cent of virulent infections. Sulphapyridine therapy causes nausea, vomiting, anorexia and malaise in about 50 per cent of cases. Furthermore, in the sulphapyridine treatment of pneumonia, one has to acquire a concentration of the drug in the circulating blood of 10, 12 or even 15 mg. per hundred cubic centimetres. With sulphathiazole, 8, 9, and 10 mg. per hundred cubic centimetres

seems to be sufficient to bring about a precipitant reduction in the temperature and a curative action.

In the practice of dentistry, both sulphanilamide and sulphathiazole have been applied locally with considerable success. They are placed in tooth sockets after extraction as a prophylactic against infection. In sulphathiazole, one has the added factor of half of the vitamin B₁ molecule, which undoubtedly promotes tissue healing. The successful use of sulphathiazole has been reported in the treatment of mouth infections, such as various types of stomatitis and gingivitis.

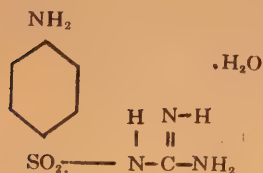
After the success achieved with one half of the vitamin B₁ molecule, the question as to what would happen if the whole vitamin B₁ molecule were united with sulphanilamide became of interest. This has not as yet been accomplished, but the pyrimidine nucleus of vitamin B₁ has been attached to sulphanilamide, producing a compound known as sulphanilylpyrimidine, or sulphadiazine. The structural formula is:



Sulphadiazine therapy further reduced the incidence of nausea, vomiting and anorexia. Furthermore, with this drug, it appears that there need not be such high blood concentrations. From 6 to 8 mg. per hundred cubic centimetres seems to be sufficient to cure pneumonia, streptococcal septicaemia and other generalized infections.

One of the sulphonamide drugs to take its place beside the others is sulphanilylguanidine. In this com-

pound, the sulphanilamide molecule is united with guanidine, a very simple substance, not unknown to the metabolism of the human body. This new compound has the following structural formula:



Although a more soluble compound than sulphathiazole, sulphanilylguanidine, or sulphaguanidine, is not so readily absorbed from the intestinal tract and hence finds wide use in the treatment of bacillary dysentery.

There is no doubt that the use of sulphonamide drugs has inaugurated a new era in the treatment of infectious diseases. These compounds all have in common the sulphanilamide group. In the enzyme systems of various pathogenic bacteria, para-amino benzoic acid plays an important role as a metabolite. The structure of this molecule in space is similar to that of sulphanilamide. When a plethora of the latter drug is present, in an infected wound, apparently it enters the metabolic processes of the bacterial cell, which in turn is unable to substitute it for para-aminobenzoic acid and consequently dies of internal asphyxia.

Thus the third step, in man's conflict against disease germs was achieved in the development of the sulphonamide drugs. These drugs may be looked upon as vitamins, as disguised, phoney vitamins, as substances which the micro-organism cannot differentiate between the spurious and the genuine material. I like to refer to these compounds as being disingenuous vitamins. Thus the sulphonamide drugs, owing to their spacial similarity to para-amino-

benzoic acid serve as bacteriostatic agents owing to their chemical relationship to this vitamin-like material which the organism so critically and desperately needs.

PENICILLIN

Our fourth step in the development of anti-infective drugs resulted in the discovery of a drug without toxicity to the host. I am referring to the more or less recent discovery of the product of mould metabolism, penicillin. It is interesting to note that the bacteriostatic activity of a principle in the mould was discovered entirely by accident. In a bacteriological laboratory in England, some four years ago, a worker neglected to place in the refrigerator certain inoculated media dishes. A mould formed which was identified routinely as a common type, *penicillium notatum*. Out of curiosity one of the assistants observed the mould on the media under the microscope. He found an area surrounding the mould which was clear of bacteria, and when other organisms were moved into that sphere, they too were killed. Thus, as a result of an accident, penicillin was discovered.

Penicillin had been originally studied in 1929 by Fleming. It was investigated in so far as was possible at the time by others. It has been used for differential culture purposes bacteriologically. Finally Chain and his co-workers, in 1940, reported for the first time an evaluation of its therapeutic effect and of its low toxicity, following the work of Dubos on soil bacillus antibacterial substances.

Everyone within the sound of my voice knows how penicillin was produced in this country by the enterprising pharmaceutical manufacturing companies. First, it was available to the armed forces and then to the civilian population. It is a matter of common knowledge that this drug has scored its shining mark in the cure of many infectious diseases

heretofore refractory to other anti-infective drugs. Penicillin is most useful in the cure of infections caused by gram positive organisms.

But our principal concern this evening is the mechanism of action of this interesting anti-biotic agent. Only those bacteria cells, in the pre-mitotic stage are affected by penicillin. It is believed at this point that the cell desperately needs pyruvic acid and that penicillin interferes with the utilization of pyruvic acid by the organism. As this interference occurs in the pre-mitotic stage, the cell does not undergo mitosis or fission and therefore other cells are not formed and the infection does not proliferate. Animal cells apparently use pyruvic acid in a different manner than do

plant cells and therefore penicillin does not interfere with the utilization of pyruvic acid by animal cells and hence does not prevent their mitotic cell division, and is therefore not toxic to the animal system. So for the first time on this planet, mankind has achieved an anti-infective drug without toxicity to the host.

We have gone through the tortuous corridors of the past and have seen the development of anti-infective drugs from protoplasmic poisons, to a drug with bacterial specificity, to disingenuous vitamins and now to a drug without toxicity. Paraphrasing the words of the former British prime-minister, "We have gone through the blood, sweat and tears and have now come to our finest hour."

ANNOUNCEMENTS

Academy of Dentistry

Annual Winter Clinic will be held in the Royal York Hotel, Toronto on Thursday, November 28.

Greater New York Dental Meeting

This meeting sponsored by the First and Second District Dental Societies will be held in Hotel Pennsylvania December 9-13. Make hotel reservations early. A program will be mailed in November upon request.

K. NEIL DONALLY, D.D.S.,
Room 106A, Hotel Pennsylvania, New York.

Chicago Dental Society

The 1947 Midwinter Meeting of the Chicago Dental Society will be held at the Stevens Hotel, February 10-13. Officers and committeemen of the Society are planning a full scale meeting similar to those held prior to the war.

"Children are natural mimics; they act like their parents in spite of every effort to teach them good manners".

SYNTHETIC PORCELAIN*

by DR. H. BURKHART, Seattle, Washington

THIS paper was written for the express purpose of presenting a résumé of the scientific research in silicate filling materials and their manipulation, by Dr. Clyde W. Davis, former Dean of the Nebraska College of Dentistry.

It is a well known fact that the human mind accepts what it understands, but tends to reject what it does not understand. Therefore, if we wish to successfully place silicate restorations that will last, it is important that we know and understand the physical and chemical properties of these materials and why they react as they do under varying conditions.

The term "silicate" is appropriate for this type of restoration because the materials are mostly silica which is changed to silicate by the synthetic process of silicization. This nomenclature has been accepted by the manufacturers and the profession alike.

The powder is composed of both soluble and insoluble substances, and consists mainly of silicon, calcium, sodium, fluorine, aluminum and phosphorus.

Of the six accepted makes of materials, the liquids are all an aqueous solution of phosphorus making an acid. In addition four have aluminum and two have magnesium. The arsenic content is slight, much less than in crown and bridge cement. Nevertheless all cavities must be carefully lined with an acid-proof cavity lining.

The liquid and powder formulas of the six accepted makes are so similar that a logical technique based upon the laws of chemistry and physics should give quite uniform results.

The following very important facts about silicates should be thoroughly understood:

1. It is the powder composed of soluble and insoluble substances, that

gives durability to the finished restoration.

2. The liquid is completely unbalanced in its stability, and is subject to an increased or decreased percentage of moisture when exposed to the air, depending upon the relative humidity. Before using, the percentage of moisture in a brand-new bottle of liquid should be reduced slightly by removing the cap and exposing the liquid to comparatively dry atmosphere for twenty minutes (set your time clock), and thereafter keep the bottle tightly corked except while placing the liquid on the slab.

3. Complete mortarization, both chemical and mechanical, must be secured on the slab.

4. All mixing and placing manipulation should be complete before crystallization begins.

5. The fewer and smaller the voids, the denser and more resistant the finished product.

6. All silicates shrink on setting, especially during the first three to five minutes. After that, the material will expand in properly placed fillings. Of the seven makes tested, five had expanded to or beyond their original volume, by the end of the first week.

From one week to four months these five continued to expand, one only slightly while two expanded excessively. Between four months and one year these three showed a sharp amount of surface waste. Between one week and four months the two remaining makes took a more gradual rate of expansion, and between four months and a year their rate of surface waste was small. This is extremely important to the lasting qualities of the restoration.

7. No cavity lining should ever be used on a newly placed silicate filling. It prevents hydrostatic expansion

*Presented before the Vancouver Dental Society, March 5, 1946.

which normally takes place within a few hours and is completed within a week. The coating found to be the best to protect setting silicate is a combination of petrolatum and cocoa butter.

POWDER CONTENTS

It was found that from 40 per cent to 100 per cent more powder could be incorporated in a given amount of liquid having the slab from 40 degrees to 60 degrees Fahrenheit; instead of following the manufacturers' printed instructions. This, of course, gives the restoration that much more added durability.

MIXING TIME

Mixing should be completed in one minute to 100 seconds. Each operator should time himself carefully for a number of mixes until he can keep well within these time limits.

If powder is added in greater amounts and shorter time, much less powder can be incorporated, while, if the spatulation is prolonged even a minute too long, the setting time will be slowed up from 100 per cent to 400 per cent. The primary jellying or setting is broken up, resistance to crushing strain is reduced and the number and size of the airspaces and voids are increased.

EXPOSURE OF LIQUID TO AIR

Six drops of each tested liquid was placed on slabs for 12 hours and exposed to air at room temperature of 74 degrees to 78 degrees Fahrenheit, and a relative humidity of 20 to 30. At the end of that time each was mixed according to the manufacturer's printed directions, covered with their advised coatings and left on the slabs at room temperatures. One set in 5½ hours while it took 36 hours for the second to set. At the end of 8 weeks the other four were not set enough to resist the Gilmore 1-pound needle.

When the liquids were placed in a humidifier with a saturated humidity,

the effect was the opposite. All makes set so very quickly that they could not be used. This was due to the liquids taking on more water. Silicate liquids are unstable and will fluctuate according to room temperature and humidity. They should be kept tightly corked.

EFFECT OF TEMPERATURE ON SETTING TIME

Silicate transferred to mouth temperature from a cold slab will set only a few minutes faster than when left on the cold slab.

EFFECT OF MOISTURE ON FILLING

If moisture reaches a freshly placed filling, the result would be a swollen, soft, sponge-like mass that will quickly wash out.

TRANSLUCENCY

Different makes of silicates and different techniques in mixing and finishing, effect the translucency.

EFFECT OF PREMATURE EXPOSURE TO SALIVA

All makes showed surface expansion and deterioration with increased opaqueness. This was especially true of the two silicates having liquids with the greater specific gravity. When the silicates were protected for 30 minutes before exposure to saliva none of the above bad effects occurred.

EFFECT OF CONTACT WITH THE AIR DURING HARDENING

Since the air has varying degrees of humidity, all silicates are affected more or less, if exposed during setting, with the exception of the few times when the moisture of the liquid and the humidity of the air are the same. All silicate must be protected from the 100 per cent humidity of the patient's breath with the rubber dam. It therefore becomes immediately evident that all silicate fillings must be covered with a combination of petrolatum and

cocoa butter as quickly as possible after placing in the cavity.

SOLUBILITY OF SILICATE

There is practically no disintegration or solubility of any accepted make of silicate, in any acid or alkaline condition found in the mouth, provided there has been no premature contact with moisture such as "leaky rubber dam," "moist ligature," etc.

ACIDITY OF SET SILICATE

All makes of silicates take on a slight acid reaction after the filling has been set. This acidity discourages the growth of decay bacteria and probably accounts for the fact that we seldom see secondary decay in or around a carefully placed silicate.

CAVITY PREPARATION

This is one of the most important factors in the success of silicate restorations:

1. All cavo-surface margins must be as nearly at right angles as possible. There must be no bevel.

2. Since no silicate material has any adhesive properties, the fillings must depend upon normal undercuts for retention.

3. There must be sufficient access to permit the cavity to be completely filled in the short time allotted.

4. There must be enough bulk to insure strength, especially at the incisal, lingual, gingival, and labio-gingival angles.

5. Because of the acidity of the liquid, the *pulp must be thoroughly protected*.

A. Thoroughly phenolize, followed by warm air.

B. A cavity lining impervious to acid, such as "repellac" or "overcoat" must be used. Many times it will be advisable to place several additional coats of cavity lining, one on the other, allowing each coat to completely dry. In other cases it may be found necessary to add a cement or other type of protective base in addition to the cavity linings. In any

event the pulp must be adequately protected.

The following summary was taken directly from "Operative Dentistry," by Dr. Clyde W. Davis, 5th Edition:

"Let us state some of the fundamentals which augur long life and permanent colouring to silicate fillings:

1. It is the silicate granules and undissolved particles which give stability.

2. A cold slab holds back the jellying for a few seconds to give time to incorporate a greater number of granules in the given bulk.

3. The jelly is composed of the acid and the more easily dissolved parts of the powder.

4. When mixed, the mass is about 75 per cent jelly, which is in excess of the needs for maximum strength. It therefore follows that the silicate granules are farther apart than they need be.

5. Manipulation in filling building should aim at driving off as much of the jelly as possible, bringing it to the surface to be dressed away with the excess. This can be done by tapping or light malleting as with the "Malletor."

6. The drawing over of a strip of any kind does the reverse, bringing the jelly to the surface and leaving no excess for dressing away to expose a greater number of silicate granules per given surface.

7. An absolute control of moisture is imperative since in the stages of setting it is the filling's worst enemy. At thirty minutes or soon thereafter moisture is a much needed friend and continues to be an essential factor for the life of the filling.

8. By this technique there are five makes which produced an expanding filling at the end of seven days.

9. Do not use varnish on a new filling as it results in a contracted filling. Use petroleum jelly containing cocoa butter at first sitting.

10. Cautions—Do not bevel the cavity margin. Always have a right angle cavosurface angle. Do not

mix too thin. Do not forget to phenolize and line the cavity in vital pulp cases with an acid-proof varnish and otherwise isolate pulp. Do not burnish or drag at the material. Always press and pat the material to place to slight excess and then subject to mallet packing. Do not remove the rubber dam till thirty minutes after mixing. Do not knead with fingers. Such handling creates fracture lines.

11. Causes of brown lines at margin:—Incorrect cavity preparation; failure to clean margins; not tightly packed over margin by Malletor to drive excess liquid beyond margins into excess; burnishing and dragging margins; failure to finish flush with margin at latter sitting.

12. Causes of disintegration:—Failure to maintain dryness of cavity and filling; evaporation of liquid either in bottle or on the slab, meaning too dense a liquid; mixing too thin; mixing on too warm a slab (above 60 degrees); over-spatulating; failure to protect filling with petroleum jelly and cocoa butter as soon as filling is contoured and to keep coated thereafter, dismissing the patient with it so coated; removing the rubber dam before thirty minutes from the time of mixing.

13. Causes of Chipping: — Faulty cavity preparation and lack of retention; placing a small bulk where fillings will receive excess load; crowding a filling to cavity through a small proximal opening; failure to mallet filling as last manipulation; kneading with the fingers; abrupt change in the direction of the cavity near margin.

14. Causes of checking:—applying cocoa butter above body temperature; creating heat when finishing; filling in protruding anteriors which are not covered during sleep; failure to coat old fillings with grease during operations under rubber dam.

15. Causes of pulp devitalization:—failure to phenolize and line the cavity with varnish impervious to free acid; failure to otherwise protect the pulp.

16. Causes for fillings turning brown:—Allowing moisture to reach the outer surface of the filling too soon, which causes the surface to swell and become sponge-like, to later absorb the oils from the food substances which subsequently oxidize; smoking paper-covered cigarettes soon after filling is placed. Abstain from smoking for twenty-four hours.

THE WILD PLACES ARE CALLING

Never since the Civil War has the U.S.A. been under such a severe and prolonged strain as during the last five years. The results are apparent on every hand. There are many persons who have almost hysterical fears of foreign countries and even for the future of civilization. With deep anxiety they follow unfavourable domestic news as it appears in the daily press or is broadcast by the radio. There is a widespread despair of the future, even among young men and women such as in other days were confident of having successful and happy lives. There is a widespread disposition to be harsh in judgments of others, whether they be politicians, the wealthy, or members of labour unions. There is a general tendency for organizations and individuals to demand what they want without regard for the needs of others.

We are not in a healthy emotional and mental state. We need to listen to the call of the wild places. Venus is brilliant in the western evening sky, hundreds of stars are overhead, and the streams make music as they plunge down their precipitate courses. There is healing for over-wrought nerves in mountain air, and in the shade of mountain forests. We need to avail ourselves of the matchless opportunities for enjoying such things which, fortunately, have been placed within easy reach of almost everybody in this favoured land.

—A.A.A.S. Bul.

The Forum

COMMON SENSE ABOUT INFLATION

How to steer a sound financial course
through economic turbulence.

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This article is based on an analysis of inflationary trends prepared by the International Statistical Bureau. The bureau serves as economic consultant to a variety of American business organizations.

IF YOU believe every wild rumour about inflation, think the dollar in your pocket will be worth only 20 cents next year, and expect the crazy advance in real estate values to go on indefinitely, you enlist in the ranks of the gullible.

If, on the other hand, you shut your eyes to the marked increase in money supply, to the activity it generates as it circulates, to the real need for many types of consumer goods and capital goods, to the actual forces that are pressing upward beneath the general price level, you refuse to apply your common sense in a situation where common sense is at a premium.

Your job, in short, is to pick the middle ground between these two extremes. How to do it is not easy; but it is possible for those who refuse to be frightened out of their wits or to be thrown into an emotional tailspin.

What you should do now depends a great deal on who you are, what you do, what you own, and what you owe. It depends also on how long present inflationary trends will continue and on what will happen then. On these points we intend to give you our conclusions, with the reasons for

them, for use in planning your individual course of action.

There are certain principles that have been tested over the years, that are as sound now as they ever were. Ignoring them in the past has always proved costly, yet more and more people are ignoring them right now. This means definitely that the blow-off stage of the inflationary cycle is approaching, and that those who throw their common sense overboard will pay a heavy penalty some time in the next year or two. Here are eight time-tested bits of advice you would do well to remember:

1. *Don't be greedy.* If you've already made nine dollars, let someone else make the last dollar.

2. *Don't speculate for quick returns.* You may be lucky enough to make large profits; few are lucky enough to keep them.

3. *Don't overwork your money.* When you take a profit, don't rush immediately into another investment merely because you are unwilling to have your money idle or drawing a low rate of interest.

4. *Don't underestimate the value of cash.* Your dollar, on the average, may buy 10 to 20 per cent less a year from now than it will today. But two years from now, in many markets, it may buy 10 to 20 per cent more.

5. *Don't forget that prices go down much more rapidly than they go up.*

6. *Don't bemoan profits you have failed to make; you might also have*

suffered losses. It is better to exercise your foresight rather than your hindsight.

7. *Don't expect to pick the exact top in any market.* There is no magic formula for forecasting. Be suspicious of anyone who tries to convince you that there is. Aim not at the exact highs and lows of the price cycle, but at the middle one-half to two-thirds of its movement.

8. *Don't be too anxious to use your accumulated savings for the purchase of luxury appliances, household items, or automobiles.* In many cases, second models will be better than the first ones. Remember that most of the things you buy now are poor values. If possible reduce your current spending. Let some of your personal inventories run down, and earmark anything that you can save for purchases after values become better.

Fortunately, the present inflationary trend has been generated by perfectly normal forces—large supplies of money and short supplies of goods. There is no danger of a political collapse. There is no danger that the dollar will soon be devalued. There is no danger of a "flight from currency" as in Germany after the last war, when prices advanced by percentages measured in the millions, billions, and trillions. You are not involved in anything mysterious, or unexplainable, or even very strange. The same thing happened after the last war, for much the same reasons.

The war was extremely costly—so costly that it might have been expected to make us poor. It did make us poor, temporarily, in the type of goods demanded by consumers and businessmen, but very rich—richer than we have ever been—in terms of money. In round numbers, here is what happened in the four years, 1942-1945:

The Government spent \$339 billion, of which \$307 billion were war expenditures. Purchasing power went up

sharply, but the supply of civilian goods became more and more restricted. The Government did not tax away the growing excess of purchasing power. Consequently, to finance the deficit, new money was created. Individuals and unincorporated business saved \$136 billion. Consumers' debts were reduced by \$3 billion.

This shows clearly why there is a great upward pressure on prices at this moment. Consumers and businessmen have available more money to spend for goods they want or need than ever before in peacetime history. The goods are not yet available in amounts great enough to relieve the pressure on prices.

HOW WILL IT END?

This inflationary cycle will end like the last one, in 1920, ended. On one day, the supply of goods at a given price will not be enough to meet the demand. A few days later, at the same price, sellers will not be able to dispose of all they have. The price boom will be over and inflated prices will go down like a punctured balloon.

How can such a drastic change occur so rapidly? It can happen literally overnight because this change comes from a reversal in mass psychology.

Real scarcities exist today in many markets. Buyers know this, and are doubly anxious to purchase; sellers know it and take advantage of it. But supplies of most items are increasing. This gain in supplies is not yet impressive. It may be interrupted from time to time by strikes. Costs may rise further. Shipments are sometimes delayed or held back. Sellers naturally continue to emphasize the difficulties and the problems. Many buyers lack information about the true level of production and believe everything they are told. By shopping here and there for wanted items, they give sellers an inflated

idea of what the true demand is. But all the time the supply keeps gaining.

One day some buyer, who is more far-sighted or more intelligent or better informed than the rest, decides the time has come to be cautious. He quietly cuts down his buying or perhaps cancels a few orders. A few more buyers follow him. Or there may be a spontaneous buyers' strike at the consumer level. Or perhaps a few sellers, seeing the end of a one-way street, make some sort of concession. The news spreads. Within a day or two everyone has heard it. Almost overnight, it is realized that the scarcities that were so real a few months ago have suddenly become fictitious. The boom is over — the bust is on.

WHEN WILL IT END?

It is much harder to be definite about the "when" than about the "how."

Adjustment of the economy to the greatly increased money supply requires an increase either in the supply of goods or in the price of goods or both. The increase in supply takes time; meanwhile, the increase in price continues. When the price increases will reach a peak, therefore, depends on two things:

1. There has to be an adequate gain in supply.

2. It must be generally recognized by buyers that this gain has occurred, that they are no longer obliged to compete in sellers' markets for scarce items.

To estimate when the gain in supply will have been adequate requires a study of productive facilities in relation to consumer, business, and export demands. Reasonably good estimates can be made.

To estimate when the gain in supply *will be recognized* as having been adequate requires an appraisal of psychology, which is less predictable and which is perfectly capable of showing one attitude toward one

market and an entirely different one toward another. Moreover, the first factor, which involves supply and demand, may be more important in some markets and less important in others than the second factor, which involves the mental attitude of buyers and sellers.

PROBABLE DURATION OF PRESENT INFLATIONARY TRENDS

Commodities will probably reach the price peak in the first half of 1947 and this will probably be the peak for the next decade. Securities will probably reach the peak in 1946 or early in 1947. From this peak there should be a decline of 25 per cent or more, discounting a business readjustment in 1946-1948. Real estate will reach the peak from 1946 to 1950 depending on type of real estate and local conditions.

COMMODITIES

If consumers should decide tomorrow that most of the goods available to them were not worth the price, if they should go on a general buying strike as they did in 1920, the advance in commodity prices would be over. *That a general buyers' strike will materialize this year is possible but highly unlikely.*

Not only do consumers have accumulated savings upon which they can draw; but they are still piling up current savings at an unprecedented peacetime rate. Until this exaggerated rate of current savings has been reduced to a more normal level, markets for consumer goods should have no difficulty in absorbing supplies as they become available.

When allowance is made for the possibility of further strikes this fall, other obstacles to production and shipments, and the buoyancy of inflationary psychology, it seems almost certain that the present rising cycle of commodity prices will carry into 1947.

SECURITIES

Demand for securities during the remainder of 1946 will be influenced by public appraisal of the earnings and dividends outlook. Basic economic factors are still predominantly bullish. After bad first half-year earnings reports of strike-bound companies have been digested, public confidence is likely to rebound. Despite reduced activity, dividends in the three months ended February 28 were 1 per cent above those of a year ago.

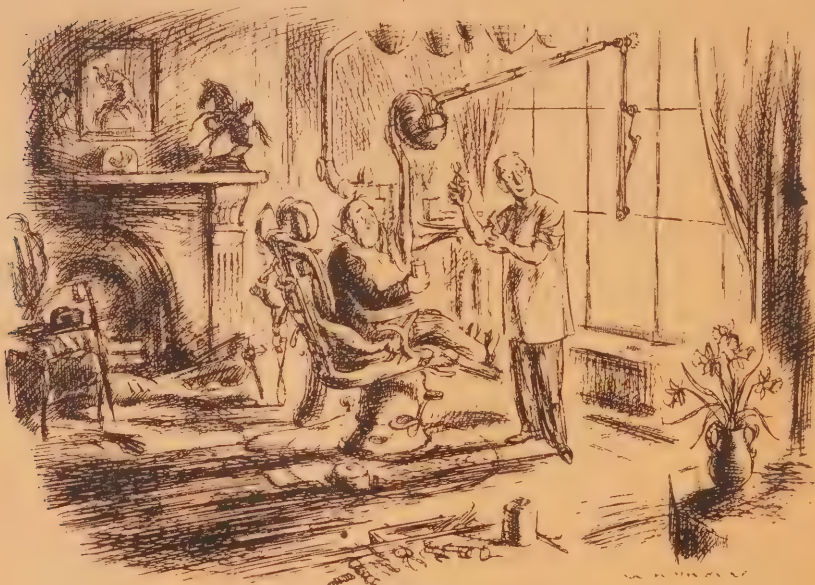
Legislative action on the extension of price control will determine the extent to which profit margins of individual concerns may be squeezed. OPA has been forced to retreat; new legislation will limit the authority of government agencies to control prices.

The reduction in Federal corporate taxes will more than offset any drop in earnings caused by reduced vol-

ume or restricted profit margins. Consequently, stock prices should advance into new high ground later this year.

After that has occurred it would be reasonable to begin adopting a more cautious attitude. The present inventory replacement boom will probably reach its peak some time in 1947 and the stock market might reasonably be expected to begin discounting this development in advance.

Looking beyond 1947-48, however, prospects favour an economic development somewhat similar to that of the twenties. This implies the probability of a further recovery in security prices. Later in the post-war decade, it would not be surprising if security prices tested the highs of 1928 or even 1929, although at this date this naturally cannot be regarded as a firm prediction.



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"Make the place cheery, don't they?"

NOT FOR PEANUTS

Editorial in Medical Economics, August, 1946. Reprinted from MEDICAL ECONOMICS by special permission. Copyright Medical Economics, Inc., Rutherford, N.J.

The time has come for individual physicians to grasp two hard facts about public relations:

First, the trained public relations counsel is a specialist; and, like any other specialist, he can't be hired for pin money.

Second, he is a specialist whom doctors urgently need today.

Among too many medical societies, poor public relations has become a chronic disorder. The doctor's problems are not explained in words which filter through to the general public. Medical men have tried to correct the situation without having either the training or the talent for it.

The labour unions of this country learned long ago the value of public esteem and the need of employing specialists to help them gain it. What's more, their members are willing to pay the freight. Some, with relatively modest incomes, pay up to \$60 a year in dues.

By contrast, a great many doctors pay dues of \$10 or \$20 a year. As far as the public is concerned, results are dismally in proportion.

What happens when a group of physicians is willing to finance a professional public relations job? Do the results justify paying a specialist a fee which may run into five figures?

Societies that have tried it consider the money supremely well spent. When California was faced not long ago with the threat of compulsory sickness insurance, the California Medical Association put on the most expensive campaign ever undertaken by a state society to lay its case before the public. Dues were raised to \$100 a head. California doctors collected some \$300,000 for that one drive. Result? Organized medicine inflicted a decisive defeat on Governor Warren and his "little Wagner-Murray-Dingell bill."

Other societies have also conducted outstanding public relations campaigns. Organized medicine in New York recently defeated a vicious antivivisection bill, not only by spending money but by spending it intelligently.

But, you say, here were *crises*—not common, everyday issues. The answer is simple: If we had not so long neglected our relations with the public, we would not have to face such crises. Magnificent surgery in an emergency stirs the imagination; prevention might have obviated the emergency.

The next few years will be critical ones for American medicine. The public will decide whether private practice is to survive and, if so, in what form. If the public is to be saved from the sophistry of the socializers, *it must be educated*.

Each state medical society may well ponder whether it can *afford* to spend less than \$25,000 a year solely on the job of improving its relations with the public. Many should spend several times that.

How is the money used? For supplying news of medicine to the nation's press. For conducting surveys of what people think about doctors, their systems, and their charges. For printing and mailing literature bringing the doctor's viewpoint to the general populace.

Each nickel must be spent intelligently by people who know their jobs. This is not a job for the executive secretary unless he has had intensive public relations experience and can spare time—along with his countless other duties—to do the job. Such is seldom the case. That doesn't mean you must employ a public relations firm—although in many instances it's desirable. You may, instead, hire a public relations man as a permanent fixture in your organization.

Individual physicians cannot shrug off responsibility by saying "That's a job for the AMA." It is not. Each unit of organized medicine is confronted with the fact that harmony begins at home. Unless all units exert themselves to the limit of their economic ability, the final decision will go by default.

The attitude of the public toward organized medicine is already antagonistic. Arguments against the profession are constantly in the press. Vigorous, timely rebuttal is sorely needed. You can't get effective public relations for peanuts. The price is high. It's worth it.

—H. SHERIDAN BAKETEL, M.D.

METHODS OF PAYMENT FOR DENTAL CARE

by JOHN OPPIE McCALL, D.D.S., New York

Condensed from Jour. A.D.A., Aug. 1946.

It will be generally agreed that complete dental care for all is the desideratum and that any service given must be of high quality and must be provided with all reasonable economy.

Let us consider first the "fee for service," or payment on an item-by-item basis, as a mechanism for paying for dental care. This is probably the greatest present barrier between patient and dentist, surpassing in the majority of instances that great bugaboo pain. When the patient knows that he needs dental care and that he should consult the dentist to see whether he does need treatment, he thinks of the visit with some financial qualms. He wonders how much unsuspected derangement the dentist is going to find. He wonders what the fees will be for service the need of which he is already aware. Fearful that the amount will be more than he wishes to pay (an arbitrary figure set up in his own mind in advance with no reference to need or the possible benefits to be derived from the service), he usually postpones the visit until driven to it, even though realizing vaguely that postponement may mean only a more complex and expensive treatment.

What are the alternatives for the fee for service? One is the annual fixed fee covering all service needed. On the voluntary basis, this may be

either an arrangement with individual patients or, on a larger scale, a group prepayment plan, commonly spoken of as voluntary health insurance. On the involuntary basis, it becomes either a tax-supported plan or compulsory health insurance, itself actually a form of taxation.

There has been some experimentation with the voluntary fixed-fee system by dentists. Its success is dependent on the enrolment of a considerable group of patients and their continuance as a group in the plan over a period of years. Usually only the worst risks enroll. Even those enrolled tend to drop out of the plan as time goes on, leaving so few in the group that the plan becomes a liability rather than an asset to the dentist.

Another disadvantage of the voluntary plan is the expense involved in acquiring members for the group.

Whatever the form that the plan eventually takes, it should, as far as possible, get away from the fee-for-service basis. Only then will it be possible for the dentist to deal with the patient in a way that eliminates the question of self-interest for the dentist in his recommendation of services to be performed and permits full rehabilitation for each patient.

Consider now private office practice, with one dentist in each office. Here, we have group practice and the

clinic as alternatives. Neither of these is new, but neither has been developed to its full potential usefulness. Both of these mechanisms have the advantage of savings in overhead, a very real benefit. Other features that are readily available in each, but are not always used to the extent desirable, are consultations between different members of the group and specialization of services on a department basis. These are the features that are today, in the field of medical care, making of the larger hospitals the *ne plus ultra* of medical service. The same principle, and with the same advantages, can be utilized in the dental field.

With application of the group practice principle (service provided in well-organized departments), supervision by specially qualified practitioners, consultation with experts in each field freely available and adequate compensation for the staff, clinics are capable of delivering the finest service. The reduction of overhead and advantageous purchasing made possible in the clinic provide for properly attainable economy.

In either the group practice or the clinic, it is necessary to plan for remuneration of the dentist. This must naturally be provided on a salary basis, but it need not be on such a level as to be unattractive if the service is properly set up.

The relationship of fee-for-service to preventive service is strikingly brought out by the well-known fact that, under that system, fees for prosthetic service (replacement of teeth lost through disease) are invariably higher for the dentist's time involved than fees for fillings, prophylaxis and other preventive and protective services.

Another question arises when we review all aspects of the question as to how dental care should be provided. This has to do with safeguards that should be set up in the operation of community programs in which the

dental services are to be rendered in private offices, as is often necessary in the smaller towns. Human nature being what it is, some sort of check on the work done for these patients as to amount and quality and charges for the work, if on a fee-for-service basis, has been found to be desirable. The value of supervision, here referred to, has been amply demonstrated in school-clinic services provided by many of the larger cities, as also in other services for which the dentist is paid in part or altogether by some welfare or other agency.

Supervision of dental service performed in clinics has come to be taken for granted. Supervision in the private office may come as something of a shock to those dentists who have not worked in clinics. Yet the need for such supervision in charitable programs is recognized by the Council on Dental Health of the American Dental Association.

Compulsory insurance programs providing dental service would constitute socialized dentistry in that the insured individuals would not contribute the entire cost of the service that they would receive.

The term "state dentistry" can be applied only to a system in which all dentists are involuntarily enrolled in a government program and are unable to engage in private practice.

To be sure, many dentists assert that they see in socialized dentistry, especially that provided under compulsory insurance, a reduction of independence of the dentist to the point where he must join the program whether he wishes it or not. Whether this occurs in our country or not depends, in my estimation, on (1) the continuance of private enterprise and retention of its rewards by those engaging in it and (2) the quality of dental care offered in private practice. In other words, I believe that people will prefer care at the hands of the private practitioner as long as they can afford it and as long as he

gives service of the highest quality. The same situation will prevail in this field as in the field of education. Education in the United States is as thoroughly socialized as any service that people receive. Boys and girls can go through elementary school and high school paying no tuition, and through city and state colleges paying only a modest tuition. Yet private schools and colleges abound, simply because they educate their students well and because parents of many boys and girls can afford to pay the tuition fees.

Dentists should consider carefully all legitimate ways of saving the community money on the dental bill of those to be served, to make sure that the beneficiaries get the service that is contracted for and that it is of high quality.

I have not as yet mentioned the element of efficiency, expressed in the

proper use of auxiliary personnel, as it affects the dental bill of the community on either a private office or a clinic basis. That the dentist can make better use of his time, in other words deliver more dental service in a given period, when he employs a dental hygienist and a competent chair assistant is well known. Most welfare and other organizations giving dental service recognize this and provide the dentists on their staffs with such aid. In the private office, full efficiency demands two chairs as the minimum setup for one dentist, even though the second chair may not be used full time. In a group practice in which two or more dentists are associated, the extra chair or chairs may be more fully used with corresponding reduction in overhead. All proper devices should be used to reduce costs.

STERILIZATION EFFECTIVENESS OF A HOT OIL BATH

by GERALD L. PARKE

U.S. Naval Dental Centre, Bethesda, Md.

Conclusions of paper in J. of D. Research, April, 1946.

(a) Sterile handpieces were consistently obtained by immersing them after use on each patient in liquid petrolatum, USP (Heavy) for a period of 2 minutes at a temperature of 250° Fahrenheit.

(b) Dental handpieces were well lubricated as a result of this method and remained so during operations in the mouth.

(c) Cold sterilization methods were ineffective, time consuming and damaging to the intricate gears in the handpiece.

(d) Boiling water was damaging to the gears in the handpiece and did not remove gross debris.

(e) No presently known method will remove debris such as mucous, tooth filings, pumice, etc., from the inside of the dental handpiece as does a solvent solution followed by the flushing

action of hot oil.

(f) No simpler method could be found to clean, sterilize and lubricate such a mechanism so effectively in so short a period of time.

(g) Dental handpieces exposed to 14 months of oil sterilization procedures have resulted in no breakdown in the mechanism of the handpiece.

CONCLUSION

The complete immersion of dental handpieces in liquid petrolatum for a period of 2 minutes at a temperature of 250°F. following operation of the instruments in a suitable solvent solution does produce a degree of sterilization equal to that of boiling water, and, in addition, very materially prolongs the life of the handpiece.



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PRESENT DAY ECONOMICS OF DENTAL PRACTICE

by DON W. GULLETT, D.D.S., Toronto, Ontario.

Doomsday prophets are never popular. Any statement made to the effect that present prosperity may be short-lived is not well received in many quarters. Promises of full employment and a high standard of living have been given by our politicians in many instances. Yet, many thinkers are of the opinion that the present economic level cannot be sustained.

A balance between labour and capital will eventually be achieved. Levelling off will be attained only when production of commodities is sustained on a continuous and long term basis. Neither interrupted production or the increasing of wages above the ability of industry to pay will lead anywhere but to disaster for national economy.

Older practitioners have seen the rise and fall over the years and learned to create a hedge against times of lower income. Even some of these learn by experience and find themselves in difficulty, having created high overhead during good times which they are unable to lower when times of lowered income eventually arrive. However, dentistry has a more important and inexperienced group wherein there was never more use for old heads on young shoulders.

Never in history were so many new graduates in dentistry beginning dental practice as during the present year. These men are not building practices; no waiting for patients is necessary. Three reasons account for this situation (1) Money is abundant (2) a back-log of civilian dental need exists (3) dental treatment service under the Department of Veterans' Af-

fairs for ex-service personnel has created more dental treatment service than was ever performed by the dentists of Canada in any one given year. All hope that increased appreciation of dental health service will continue, yet it must be admitted that a sizeable percentage is artificially supported and the public has not the outlets for its swollen income that will be available when production of all commodities get under way.

Change in the amount of expendable money in the common citizen's purse can occur very quickly and this alteration can be reflected in the dental office over-night as a result. An authentic survey conducted by a federal government agency in the United States has produced the following interesting figures:

"Families in the top 10% income bracket now hold 60% of all personal liquid assets. The next 20% hold 27% of such assets, the next 30% hold 12% while the bottom 40% only have 1%, which is to say that 40% of the American families have virtually no nest egg at all."

This statement gives at least a partial reason why our whole economy can so rapidly change. Undoubtedly, the same figures apply closely to Canada.

As compared to the pre-war year 1938 there is a 10 percent increase in Canadian dental personnel. Added to this is the fact that all dental schools are filled to capacity with great numbers clamouring for entrance. After a short interval, while these students are in school, we may expect another drastic increase in dental personnel.

Certain deductions can easily be made from these facts. The population has not increased materially so that the ratio of population to dentist is decreasing and there will be more dentists to serve the same number of people. Undoubtedly an increased appreciation of dental service exists which we trust will equalize the supply of personnel. Long term success in dental practice depends upon the service rendered. When people are desperate almost any service will be accepted in order to overcome their predicament but a continuing practice has never been built by such relationship between dentist and patient. Now is the time for the most exacting, painstaking service of which the dental practitioner is capable—the best hedge against bad times in dental practice. The source by which the patient comes to the dental office, the amount of the fee and the present circumstances of the patient are all secondary matters. These may all rapidly be altered. Only the service rendered can remain constant and be controlled by the dentist.

There is only one man that can be responsible for my conduct, and that is myself.

—Henry J. Cadbury.

Many men owe the grandeur of their lives to their tremendous difficulties. — Surgeon.

WARNING

In the previous timely article, Dr. Gullett has pointed out that serious changes in dental practice can occur overnight, that our whole economy can change rapidly. In this connection I was interested in an article by P. M. Richards in *Saturday Night* of August 10 in which he says in part: "To sustain anything like full employment, the masses of people in the low-income brackets must be able to buy."

"A survey of U.S. family finances made by the Federal Reserve Board and the Bureau of Agricultural Economics shows that savings, to an even greater extent than incomes, are concentrated in relatively few hands. While no similar survey has been made in Canada, the situation here is probably much the same. The most significant fact is that even a small rise in prices, say 15 per cent, can sharply reduce the buying power of a large majority of families or "buying units."

"In groups with incomes below \$3,000 a year are nearly 70 per cent of the United States' spending units. Among them, they hold 34 per cent of liquid assets and account for 26 per cent of current savings, yet the savings and assets of individual families are so small that they offer no great market for industry's products other than the bare necessities.

"Moving up the income scale, between \$3,000 and \$3,999 of income was received by 15.2 per cent of those studied. The current savings of these families amounted to \$430 and liquid assets averaged \$900. The real market for expensive things like cars, houses and refrigerators begins here. But, by and large, the families in this group also have to count their dollars. They are not dug in against a wave of sharp price rises, and they could disappear quickly from the market for non-essential goods.

"These facts indicate that sharp price rises could quickly send most U.S. families out of the market for all but necessities. A rise in food and clothing and rents might snuff out the present selling boom for automobiles, refrigerators, radios and washing machines sooner than most people think. Furthermore, the steady market for most consumer goods is small in relation to the total number of families. This market is concentrated in the 3,400,000 families that receive more than \$5,000 a year. That's only 7.4 per cent of the aggregate."

All of us are probably ready to admit that public appreciation of good dental health has increased a great deal during the past few years and perhaps many would say that popular appreciation is the forerunner of popular demand but the question arises; Are dental requirements going to receive priority in the minds of the public over automobiles, radios, refrigerators, etc.? A further question arises as to the possibility of obtaining dental service by ninety per cent of the people if we become faced with any sharp price rise in the cost of living. At the time of writing, September 2, it would appear that we are faced with a probable acceleration of the upward trend in prices. At present building costs are nearly 60% above prewar

levels and are continuing to increase at the rate of at least 10% per year. This is typical of most industries. Labour unrest has the securities market worried as economic equilibrium is in danger of dislocation. Not all consumer groups can accommodate themselves to increased price levels nor can our goods be sold in a highly competitive foreign market. It would seem as if certain groups were trying to accomplish the impossible task of arriving at a low-production prosperity. There is a deferment of expectation in many industries. There is much delay in making any real progress towards peace. The accumulation of perplexities should generate some measure of caution in the minds of dentists generally.

M.H.G.

Labour, business, politics, the churches, and even the various departments and bureaus of the government are all strongly organized today. And why? Because in a capitalistic society each man is expected to be financially self-supporting, and he finds opportunity enhanced through strong organization.

If organized dentistry would serve its purpose well, in a nation of strong organizations, it too must be strong. Its members should give that proposition first place, letting the rate of dues fall where it will. — Paul F. O'Brien.

BOOK REVIEW

Complete Denture Prosthesis, by Rudolph O. Schlosser, D.D.S., Professor of Prosthetic Dentistry, Northwestern University Dental School. Second edition, 466 pages, 288 illustrations. Published by the W. B. Saunders Company, Philadelphia and London. Canadian Agents, McAlinsh and Co. Ltd., Toronto. Price \$6.25.

"The purpose of this book is to furnish the student—undergraduate, graduate or post-graduate—with a guide to a better understanding of the fundamental principles involved in complete denture prosthesis and the means to a solution of these problems". The many advances made in clinical and laboratory procedures since the publication of the first edition in 1939, more especially the general use of acrylic resins, have made the revision and publication of a second edition desirable.

The first chapter of the book deals with basic considerations such as the objectives of complete denture prosthesis: e.g., mastication,

aesthetics, phonetics, and comfort. Then follows chapters on oral anatomy and the masticatory mechanism. From there the author leads on to examination, diagnosis and prognosis and practical application of physics and other requisites for success in complete denture prosthesis. With this preparation the major portion of the book offers detailed description of the technique as taught by the author and in addition various other contemporary methods are described. The portion of the work dealing with practical technique covers about 350 pages and is very thorough. The last chapter is very interesting and helpful in that it deals with complete denture prosthesis for anomalies of jaw form and relation.

This book will form an excellent addition to the library of any dentist engaged in complete denture prosthesis and the author is to be congratulated on achieving his stated purpose.

KENNETH M. JOHNSON

"Putting things off somehow mostly applies to duties and not to pleasures."

"Some men love to work, and some love to play. Wise men love both."

DENTAL CORPS NEWS

SUPPLEMENTARY LIST OF CANADIAN DENTAL CORPS OFFICERS

RETIREMENTS

Rank, Name and Date	Civilian Address	Rank, Name and Date	Civilian Address
Capt. R. W. Ball, 22-7-46	Halifax, N.S.	Capt. D. E. McCutcheon, 25-7-46	Toronto, Ont.
Major V. M. Nickerson, 15-7-46	Yarmouth, N.S.	Capt. D. A. R. McDougall, 12-7-46	Ottawa, Ont.
Capt. R. N. Ogilvie, 19-6-46	Halifax, N.S.	Capt. A. H. McElhone, 8-7-46	Toronto, Ont.
Capt. T. L. Rogers, 30-7-46	Yarmouth, N.S.	Capt. D. O. McIntyre, 23-7-46	Toronto, Ont.
Capt. M. Star, 19-6-46	Yarmouth, N.S.	Major H. T. McLachlan, 15-7-46	Toronto, Ont.
Capt. L. Bouthillier, 18-7-46	Ste. Hyacinthe, Que.	Capt. K. J. Paynter, 23-7-46	Kingston, Ont.
Capt. H. L. Boyer, 8-7-46	Napierville, Que.	Capt. H. W. Reeves, 16-7-46	Paris, Ont.
Capt. R. H. Brouillette, 8-7-46	Montreal, Que.	Capt. H. A. Shaver, 28-6-46	St. Catharines, Ont.
Capt. T. H. Corcoran, 9-7-46	Limoilou, Que.	Capt. E. G. Sinclair, 30-7-46	Toronto, Ont.
Capt. J. M. Duckett, 13-7-46	Joliette, Que.	Capt. R. J. Sutherland, 12-7-46	Toronto, Ont.
Major M. E. Gross, 8-7-46	Montreal, Que.	Capt. J. T. Thompson, 5-7-46	Toronto, Ont.
Lieut. J. M. Earle, 24-7-46	Montreal, Que.	Capt. M. Wertman, 24-7-46	Kirkland Lake, Ont.
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Capt. G. Lapointe, 2-7-46	Montreal, Que.	Capt. B. R. Zener, 29-7-46	Toronto, Ont.
Capt. J. M. P. Lefebvre, 18-7-46	Huntingdon, Que.	Capt. B. Atkrikov, 2-7-46	Winnipeg, Man.
Capt. R. Manegre, 8-7-46	St. Cuthbert, Que.	Capt. M. Back, 17-7-46	Winnipeg, Man.
Capt. J. L. Masse, 11-7-46	Charlesbourg, Que.	Capt. L. Bloom, 15-4-46	Selkirk, Man.
Capt. J. N. Paquet, 24-7-46	Montmagny, Que.	Capt. R. H. Blaquiére, 19-7-46	Edam, Sask.
Capt. A. E. Pye, 2-7-46	Montreal, Que.	Capt. L. Bolsby, 4-7-46	Morse, Sask.
Capt. J. A. A. Racine, 9-7-46	Quebec, Que.	Capt. K. Epstein, 1-8-46	Saskatoon, Sask.
Capt. M. Raymond, 22-7-46	Noranda, Que.	Capt. S. R. Gelman, 18-7-46	Regina, Sask.
Capt. P. A. Trepanier, 8-8-46	St. Charles, Que.	Capt. S. P. Klimaszko, 31-7-46	Goodeve, Sask.
Capt. C. Vosberg, 8-7-46	Montreal, Que.	Capt. M. Levine, 19-7-46	Saskatoon, Sask.
Major R. M. Anderson, 24-7-46	Toronto, Ont.	Capt. R. E. Partridge, 18-6-46	Prince Albert, Sask.
Capt. E. H. Ante, 19-7-46	Toronto, Ont.	Capt. L. Shapira, 24-7-46	Shelbrook, Sask.
Lt.-Col. J. D. Barnett, 11-7-46	Toronto, Ont.	Capt. R. B. Burgman, 1-3-46	Hillcrest, Alta.
Capt. A. W. Boland, 18-7-46	Aurora, Ont.	Capt. G. C. Evans, 11-7-46	Edmonton, Alta.
Capt. G. L. Birton, 10-7-46	Brampton, Ont.	Capt. F. A. Fernet, 30-7-46	Calgary, Alta.
Capt. E. H. Carson, 31-7-46	Toronto, Ont.	Capt. E. Humeniuk, 6-7-46	Edmonton, Alta.
Capt. A. L. Cook, 7-7-46	Tillsonburg, Ont.	Capt. M. Mickelson, 1-8-46	Edmonton, Alta.
Capt. J. S. Corcoran, 10-7-46	Elmvale, Ont.	Capt. H. L. Samuels, 8-7-46	Edmonton, Alta.
Capt. J. E. Fuller, 18-7-46	Toronto, Ont.	Capt. F. A. Currie, 8-7-46	New Westminster, B.C.
Capt. A. A. Fyffe, 9-7-46	Regina, Sask.	Capt. E. P. Gill, 2-7-46	Victoria, B.C.
Capt. A. H. Golden, 23-7-46	Toronto, Ont.	Capt. W. H. Inkster, 5-7-46	Vancouver, B.C.
Capt. E. B. Hooks, 31-7-46	Toronto, Ont.	Capt. T. W. James, 9-7-46	Esquimalt, B.C.
Capt. W. R. Jackson, 11-7-46	Toronto, Ont.	Capt. L. O. Lind, 3-7-46	Vancouver, B.C.
Capt. B. A. Kotseff, 4-7-46	Toronto, Ont.	Capt. J. P. MacPherson, 23-7-46	Victoria, B.C.
Major H. S. Lankin, 4-7-46	Toronto, Ont.	Capt. A. H. Patterson, 5-7-46	Sardis, B.C.
Capt. H. R. Lindsay, 17-7-46	Arnprior, Ont.	Major H. A. Simmons, 26-7-46	Vancouver, B.C.
Capt. C. H. Loucks, 8-7-46	Orangeville, Ont.	Capt. W. J. Sproule, 30-7-46	Vancouver, B.C.
Capt. K. N. Morrison, 28-6-46	Guelph, Ont.	Capt. J. Vingo, 5-7-4	Nelson, B.C.
Capt. R. G. McColl, 22-6-46	Toronto, Ont.		

CANADIAN DENTAL ASSOCIATION NEWS

(FROM THE OFFICE OF THE SECRETARY)

Resignation of Vice-President

With great regret the resignation of our distinguished Vice-President, Armand Fortier, has been received. Dr. Fortier, through the advice of his physician, has been forced to relinquish all activities outside of his practice. In his letter to the President he expresses the hope that he may be able to resume his work with the Association at a later date. His forced retirement is a great loss and we sincerely trust that we may have again his valued contributions in the near future.

Alberta Increases C.D.A. Grant

At the annual meeting of the Alberta Dental Association the grant to the C.D.A. was increased from four to five dollars *per caput* to be effective for the current year. This is the fourth province to make this increase.

Retirement of Director General of Dental Services

As of August 31, Colonel D. S. Coons retired as D.G.D.S. of the C.D.C. and is succeeded by Colonel E. M. Wansbrough. Colonel Coons will resume private practice in Hamilton.

British Dental Association Membership

Members of the Canadian Dental Association may become affiliated members of the British Dental Association. The annual fee for such membership is one pound, eleven shillings and six pence, which includes subscription to the B.D.A. Journal. Any member desiring to become an affiliated member of the B.D.A. should submit the proper fee either directly to Mr. W. G. Senior, Dental Secretary, British Dental Association, 13 Hill St., Berkeley

Square, London, W.1, or to the Secretary of the C.D.A., where arrangements will be made.

Dental Personnel in Canada

The Secretary was requested to meet a Special Government Committee in Ottawa on August 21 last, on the question of present and future needs of dental personnel. The Government Committee is made up of representatives of the departments concerned (Departments of National Health & Welfare, Veterans' Affairs and Labour). The purpose is to study the personnel requirements of all vocations. Ultimately it is proposed to establish a counselling service for the Dominion, probably under the Department of Labour. The following brief was presented. The Government Committee expressed general agreement with the contents of the memorandum.

Memorandum Re Dental Personnel in Canada

The post-war period has brought a strain upon the Canadian Dental profession. Primarily this is caused by two main reasons. First, due to the large percentage of dental personnel serving in the military forces during the war a back-log of dental need was created among the civilian population and secondly the dental benefit under the Department of Veterans' Affairs has tremendously increased the demand for dental services as all ex-service personnel are entitled to mouth rehabilitation.

This latter service alone has created a temporary demand for dental service which probably exceeds the amount of dental service ever rendered by the profession in Canada in any one year previously. Consequently it is possible that in some areas, under present conditions, Canadians are finding even more difficulty now in securing dental service than during the war. The profession is making every attempt to render service to ex-service personnel and cooperate with the Department of Veterans' Affairs in this commendable effort to improve the health of all those who served in the military forces. The demand for this service is probably at its peak at the present time, and as the condition is not a recurrent one, the general public should exercise some temporary patience for a gradual diminution

of the number demanding this special service which can be anticipated in the near future.

Owing to lack of suitable office space retired dental officers have found difficulty in re-establishing themselves in civilian practice. Approximately eighty percent or more of these members are now retired and nearly all are re-established and will gradually relieve the stress.

During the war practically all new graduates from the dental schools went directly into military service. This year's graduates are entering civilian ranks.

An unprecedented number of dental offices are being established this year by the dentists retired from the military services and the 1946 graduates. The adjustment has been retarded somewhat owing to the problem of securing suitable office accommodation. During this transition period there exist some incongruities in the distribution of personnel which will tend to be corrected in the next few months.

The facts are that there is, in Canada, a ten percent increase in dental personnel as compared to the pre-war year 1938. As far as is known, Canada is the only country in the world with such an increase during the war years. In addition the dental schools are filled with exceptionally large classes. As a consequence, it is believed that there will be sufficient personnel under ordinary conditions. The ratio of population to dentists will be reduced through the increase in personnel and with the greater number of students in dental schools further reduction can be predicted with their graduation.

Undoubtedly an increased appreciation of dental service has developed during recent years and it is hoped that no recession will occur. The services rendered by the Canadian Dental Corps through the war years and the government services being made available for ex-service personnel at the present time are of great public health educational value.

As to the future, various factors, including the availability of commodities, the status of employment, and the general economic conditions or the adoption of new health programs will all affect the demand. In the light of past experience, it is believed that indicated increased dental personnel will be able to meet future demands unless some drastic changes are made in the health services of Canada.

Comparative figures for Canadian dental

personnel of recent years are as follows (as of January 1st each year):

1938	4,174
1943	4,294
1944	4,405
1945	4,529
1946	4,565

Respecting the longer view, in 1939 a survey was taken under the auspices of an independent concern to gain some facts respecting dental practice in the city of Toronto. One set of figures established are important for they have a bearing on determining the need of the future and undoubtedly are applicable relatively to the rest of Canada. In answer to the question "What percentage of your available time in 1938 was occupied at the chair?" one hundred and twenty-two dentists gave responses that lent themselves to tabulation. The following table gives the replies averaged for each income group:

<i>Income Group</i>	<i>Average</i>
\$5,000 & over	82.8%
\$4,000 to \$4,999	79.1%
\$3,000 to \$3,999	66.8%
\$2,000 to \$2,999	55.9%
\$1,000 to \$1,999	43.7%
Under \$1,000	35.0%

It is apparent that on the average a considerable proportion of the dentist's time was unemployed at the chair. In reality then, there are two considerations for the future, firstly, to fully employ the number of dentists that existed in 1938 and secondly to absorb an additional 10% now existent together with the enlarged classes which will graduate during the years next following.

The above facts are basic in endeavouring to determine the need for any great increase in the number of dentists and leads to a consideration of the student enrolment in the dental schools.

Dental education is composed of two pre-dental and four professional years. The arrangement of the course varies somewhat in the different schools. As of February 1946 the attendance in the professional years was as follows:

Freshmen	201
Sophomores	88
Juniors	126
Seniors	103
Total	518

To be added to this number are a few who attended schools in the United States, chiefly from British Columbia. There were 20 students from Canada in attendance at American schools in the year 1944.

In view of the demand for accommodation by ex-service personnel, each school was requested to state the maximum number that could be accommodated in a class. The replies were as follows:—(The average class of the last six years is given in brackets.)

Dalhousie	10	(10)
McGill	35	(16)
Montreal	60	(24)
Toronto	200	(50)
Alberta	40	(14)
Total	345	

These figures represent the largest number which can be given adequate training. Schools are limited as to numbers especially in clinical teaching. Each school is making every attempt to accommodate as many as possible. Pre-dental classes were filled to capacity last fall.

Every endeavour is being made to select students upon as fair a basis as possible taking into consideration the academic standing and length of service of all ex-service personnel.

NEWS FROM THE PROVINCES

ALBERTA

Dr. Rooney Honoured

On July 5 about fifty men attended a complimentary dinner given to Dr. R. A. Rooney by the Calgary Dental Society. It was the desire of the Society to honour Dr. Rooney and to express appreciation for his services to the profession during a great many years as Secretary and Registrar.

Dr. Rooney was made a Life Member of the Calgary Dental Society and was presented with an engraved pen and pencil set.

SASKATCHEWAN

Saskatoon Dental Society

September meeting:—Mr. George Porteous, M.B.E., a survivor of the Winnipeg Grenadiers from Hong Kong related many experiences

while there, the siege itself, the terrible food situation under which all suffered from malnutrition, pellagra, beri beri, dysentery, etc. He referred to the very trying conditions and to Drs. Wynn Cunningham and Mase Spence (dentists) as the heroes of Hong Kong. Not only having to live under the terrible conditions these men carried on their work skillfully and with a sense of humour. They were the backbone for the morale of the men. He paid very high tribute to these men for the wonderful services rendered.

MANITOBA

Winnipeg Dental Nurses and Assistants

September 9—Fifty-seven girls attended the opening meeting of the season.

Miss Hazel Wylie, immediate past president, who represented Winnipeg at the Canadian Dental Nurses' and Assistants' Association Convention gave a detailed account of the meeting and also of the Ontario Dental Nurses' and Assistants' Convention.

A cheque for \$38.50 was presented to the treasurer as the proceeds of the sale of amalgam collected during the past season.

ONTARIO

Brant County Dental Society

Sept. 13—President Dr. Hugh F. Smith welcomed Drs. Watson Race, R. McLaughlin, and H. C. Cobham on their return from Dental Corps service, also Drs. Douglas J. Badke and K. M. McPherson, recently of the C.D.C., who have lately commenced practice in Brantford. He then thanked Dr. W. L. Hutton M.O.H. for his fine cooperation with the society in their different undertakings.

Present at the meeting were Dr. Frank Koli, Director of Dental Service for the Province, Dr. Glenn Mitton, Dr. Howard Swales and Dr. W. McIntosh from the Central Dental Public Health Committee, Toronto, of which Dr. S. A. MacGregor is chairman, working under the auspices of the Ontario Dental Association.

The meeting was held mainly for the purpose of forming a local Dental Public Health Committee. It was decided that the local committee be composed of four dentists and representatives from different organizations of the city. The work will be along educational lines in preventive dentistry and with

the new ideas that have been formulated, it is expected that beneficial results will ensue.

Brantford still continues to use sodium fluoride in its water supply, but it was always stated that no appreciable improvement would be expected from this source in the control of dental caries for some years, aside from the possible lowering of the L. Acidophilus count.

Eastern Ontario Dental Association

The annual meeting of this society was held in Ottawa on September 23 and 24. The registered attendance was 125 and many members were accompanied by their wives who were royally entertained by the Ladies Committee of the Ottawa Dental Society. The program arrangements of the Meeting were well planned and left little to be desired. The speakers were good and covered a variety of timely subjects presenting current thought and some of the newer techniques in present day dental practice.

President Dr. Murray Purcell of Pembroke proved himself a very gracious yet masterly chairman of all meetings. In his opening address he expressed appreciation for the leaders of dentistry, gratitude to the members of the Canadian Dental Corps for a job well done and called upon his colleagues in dentistry to continue to take their place as citizens in moulding our nation's fabric. Dr. Eugene J. North from Buffalo was the first essayist. He suggested that "Dentistry for children began to be emphasized during the days of the depression when equipment dealers began producing children's chairs and doll's houses, etc., as a new sales project. There the present day interest really had its beginning but of course it was the wrong approach. It is up to the profession to promote dentistry for children and the dentists in general practice must give the service." The speaker gave a fine address including a discussion of child management, techniques for good service and many helpful suggestions in the care of the child's teeth.

Dr. R. E. Valin of Ottawa, a member of the Ontario Cancer Commission gave a short address indicating what a dentist can do in the war against this dread disease which claims, as the cause of death, one person in every eight who died. Early diagnosis of malignant growths is the only hope of cure

and there is a real hope if the disease is diagnosed early enough.

Dr. S. Copeland of Toronto presented a technical paper illustrated by beautiful carvings to illustrate his technique. However Dr. Copeland is best remembered by his fine motion pictures in colour taken on his trip to Mexico. This entertainment was truly a rare treat and indicates something of the pleasure a well developed hobby can bring not only to yourself but to others.

Dr. W. G. McIntosh of Toronto proved himself one of Dentistry's bright young men. He reviewed the place and function of the various periodontal packs in modern use. He classified them as follows:

1. Germicidal pack.
2. Displacement pack.
3. Combined germicidal & displacement pack.
4. Chemosurgical pack.
5. Surgical pack.

Dr. James Coupland of Ottawa presented a discussion on the "Uses and Limitations of X-Rays in Oral diagnosis: The speaker approached his problem with 3 requisites—1) Good X-Ray negatives; 2) Good knowledge of dental anatomy, histology and pathology of areas examined and 3) Good knowledge of the physics of X-Rays. He pointed out that the value of X-Rays in disclosing caries was well known and quoted a survey study which indicated for every carious defect discovered clinically, two would be disclosed by use of the X-Ray. The speaker expressed a conservative attitude toward non-vital teeth. He suggested the non-vital tooth that satisfied normal clinical and radiographic requirements was as safe in rheumatoid arthritic patients as any other person. Further he suggested that dental foci of infection which were radiographically indicated as such, should be removed as part of a general treatment program rather than as the Specific cause of general disease.

Dr. Frank Cole of Toronto, presented a modified Myer's technique for the construction of complete artificial dentures. He emphasized the need of good impressions, good accurately fitting bite blocks to give accurate centric bite relation at the correct vertical openings. Incidentally he emphasized that the centric relation changes with a change in the vertical opening. Further he gave a



DR. C. M. PURCELL
Pembroke, Ont.

method of establishing protrusive and lateral balanced occlusion without the use of adjustable articulators. The speaker indicated innumerable practical ideas for making better dentures without elaborate equipment.

Dr. S. A. MacGregor, Dr. H. A. Swales and Dr. R. P. Lowery attended the meeting representing the Dental Public Health Committee of the Ontario Dental Association and all pressed for an increased interest in dental care of children's teeth and education of parent and child in the value of good teeth for good health.

In spite of the array of splendid professional talent perhaps the highlight of the meeting would be awarded by unanimous vote to Mr. Grattan O'Leary of the Ottawa Journal. This speaker suggested that "too many people practice False Democracy". "They can tell you all about what is happening in foreign countries but know very little about our community, provincial or national affairs. During the war we told ourselves our soldiers were fight-

ing for a brave new world. We expected after the last shot was fired, to find ourselves in a paradise existence of wonderful gadgets, but now we are in the cold gray dawn of reality. We live in a day of tremendous crisis—a world undergoing agony and profound pessimism and disillusion."

Further Mr. O'Leary suggested Democracy's battles are never final. "What is possible and what is vital is, that there be created in our country a pattern of public thought and public morality. It is your duty and mine to go out and see to it that those we send to our Parliament represent the best hearts and minds of the country and we should be actively interested in performing that duty."

Mr. O'Leary went on to say that "For three-quarters of a century all the intellectuals of Europe were telling the people there that religion was outmoded and that faith no longer mattered. They taught agnosticism and that hope lay in scientific development. That is the challenge of our world today." The speaker suggested that technical training had nothing to do with basic education—education that leads automatically to good citizenship with a sense of justice, fairness, sportsmanship, mercy, compassion and a love of beauty and truth for its own sake. The speaker warned in conclusion that no healing, no peace and no security could come to the world "unless and until we in our own community, and all others, get back to the eternal truths of the church. During the war we told ourselves that God was on the side of democracy. The time has come to put democracy on the side of God."

And thus a fine meeting came to an end with the usual president's dinner and an evening of fellowship and fun. Everyone a little tired but everyone a little proud of his own Eastern Ontario group.

Congratulations boys, it was well done.

T.R.M.

QUEBEC

Montreal Endodontia Society

BULLETIN sent to Members, Sept., 1946

During a polio epidemic, everyone wishes to take precautionary measures to prevent its spread. The rhinologist will not remove tonsils or adenoids; the oral surgeon hesitates to

extract teeth for children because it is claimed that the polio virus attacks the exposed nerve endings.

Should the endodontist take any precautionary measures? . . . The following telegram was sent to a group of leading authorities in the United States:

"In your opinion, does the practice of endodontia endanger the health of our patients during a polio epidemic?"

A. "No; less danger than extraction."—Clyde Davis, Lincoln, Neb.

A. "No."—Balint Orban, Chicago.

A. "Endodontia under circumstances O.K."—E. A. Leiban, New York.

A. "Prevalent opinion is to do as little as possible during polio epidemic."—E. G. Van Valey, New York.

A. "I see no relation between endodontia and polio epidemic."—E. D. Coolidge, Chicago.

A. "No available evidence to indicate endodontic procedures contra-indicated in polio cases."—R. F. Sommer, Ann Arbor, Mich.

A. "Do not believe that endodontia endangers health of patients during polio epidemic."—H. Maxman, Detroit, Mich.

A. "No evidence on causative factors; refrain treating teeth during polio epidemic."—I. Epstein, St. Paul, Minn.

A. "No objection to endodontic treatment during polio epidemic. If cautions, postpone treatment."—I. Grossman, Philadelphia.

Dr. Aisenberg reported in May 1945 (*Journal of the A.D.A.*) that "Polio has been known to enter the body through teeth with exposed pulps." And again in the September 1946 issue of the *Journal of the A.D.A.* "54.3% of polio cases showed pulpal exposure and further data obtained showed that patients from three states with polio had a higher incidence of pulpal exposures than those not having polio."

One would accept then that the measure of prevention should be to cleanse and seal every carious tooth with an exposed pulp, vital or non-vital, and that the practice of endodontia may be resorted to.

DR. H. H. PEARSON

EMPIRE NEWS

GREAT BRITAIN

Health of the People

From Debate on Britain's National Health Service Bill.

We are not concerned about the medical profession or the dentists, or the opticians; we are concerned about the health of the people of this country. With what else should we be concerned?—The Lord Privy Seal (Mr. Arthur Greenwood)—*D. Mag. and O. Topics.*

House of Commons Passes British National Health Plan

The British House of Commons on July 26 approved and sent to the House of Lords the National Health Service Bill, which would establish free medical, hospital and nursing service, ranging from major operations to household medicines, beginning in 1948.

Aneurin Bevan, minister of health, appealed to physicians for their cooperation, without which, he asserted, the plan was "bound to fail." The British Medical Association repeatedly has voiced opposition to the proposal.

Members of the Conservative opposition at the same time argued that the plan would deprive physicians of their "freedom and independence" and would centralize too much power in the health minister.

Under the plan, fees, salaries and other expenses incurred in a patient's illness would be paid by the government, but those who desired might buy extra comforts or consult and pay independent physicians.—*Jour. of A.D.A.*

Dental Health Centres

At a meeting of the Dental Committee with the Minister of Health held June 18, the Minister was asked whether or not Dental Clinics would be at the Health Centres. The answer was that "they certainly will be because we do not want Dental Clinics to be separated from the rest of the Health Services".

Artificial Teeth Banned in Act of 1770

In England, in 1770, artificial teeth were forbidden by Act of Parliament, together with high-heeled shoes, false hair, scents, paints, and cosmetics, says a writer in the *Surrey Comet*.

The penalties for offending against the Act were the same as for witchcraft. Moreover, if it could be proved that any of His Majesty's male subjects had been decoyed into matrimony by the use of any of these arts, the marriage could be declared void.

—*D. Mag. and Oral Topics.*

AUSTRALIA

Is it Necessary to Point a Moral?

The following is a genuine advertisement which appeared in the "Wanted to Sell" column of a recent issue of a Melbourne suburban newspaper:—

Dental plates, top and lower set; never been used; cost £10/10/—; will take £5. "Comfort."—*Australian J. of Dent.*

NEW ZEALAND

National Health Service

Excerpt from Editorial in N.Z. Dent. Jour. Apr., 1946.

In this Dominion it may be said that the first phase of a National Dental Health Service commenced to operate 25 years ago, when the present School Dental Service was established by the Government. At first it met with a certain amount of criticism from the profession, chiefly on the ground that the work was to be undertaken by Dental Nurses after only two years' training. However, in the special sphere in which they have worked, it is generally recognized now that they have done excellent work both from an operative and educational point of view.

This service, which may be said to have constituted the nucleus of a national scheme, is now to be extended to embrace the treatment of adolescents by a fully qualified personnel; while later on, a complete National Dental Health Service is envisaged by the Minister of Health. But in connection with both objectives, certain factors present themselves that call for attention. Firstly, there is the question of attracting a sufficient number of students to take up Dentistry; secondly, the present limited capacity of the National School in Dunedin which is already handicapped both with regard to buildings and staff in coping with increased numbers of entrants; and thirdly, the monetary induce-

ment offered to attract sufficiently large number of graduates other than those under the bursary scheme to enter the service of the Government. This latter point is an important one if the service is to attract the best brains in the Dominion. The philosophy which affects to teach us a contempt of money does not run very deep, nor is such a doctrine likely to attract many disciples in these strenuous days. Just as trade follows the flag, so does brains follow the salary, and it is to be hoped that in any National Dental Health Service in this Dominion the salaries of those wishing to enter the service of the State will be made sufficiently attractive.

The Dental Problem in New Zealand in Relation to the Modern Conception of Health Services

by J. L. Saunders, B.D.S., (N.Z.) Director of Dental Hygiene, Department of Health.

Condensed from N.Z. Dental Jour. April 1946

The School Dental Service is well known to you, and there is no need for me to go into details in regard to its operation.

In the first place it complies with the principle that has been enunciated in both England and America that when dental services are being developed, children should have priority. The School Dental Service in this country is now providing regular dental care for approximately 200,000 children. Of these, more than 22,000 are children of pre-school age, a section of the community whose attendance is strongly encouraged, although it is frequently difficult to obtain. There are 428 treatment centres, and the staff, including dental nurses in training, numbers 617. More than one and a half million operations were performed last year. The conservative nature of the work is evidenced by the fact that for every 100 fillings performed, extractions numbered only 7.5.

I think it will be agreed that our existing State Dental Service conforms very closely with the ideals that have been enunciated in

connection with the modern conception of Health Services, in that:—

- (a) It is a responsibility that has been undertaken by Government;
- (b) It is free of cost to the individual, irrespective of means of other consideration; and
- (c) Its object is to promise good health, both dental and general.

The inauguration of a dental service for adolescents which will form the second phase of a National Dental Service has, as you know, been under consideration for some time past.

The main principles have been agreed upon between the Department and those concerned and are at present receiving the consideration of the Government. They are as follows:—

- (1) The adolescent service should be staffed by full-time salaried dental officers.
- (2) The services of school dental nurses, when available, may be employed in connection with the treatment of patients up to 15 years of age, to the extent that this can be done within the present range of treatment carried out by school dental nurses.
- (3) Pending the development of a full-time salaried service, the dental profession will be invited to operate a service for adolescents on a fee-for-service basis.

For the last three years, the Government has offered bursaries to students undertaking the dental course. These bursaries are of a value of £75 per annum, with an additional £40 per annum when the student is obliged to reside away from his home. The conditions of award do not include repayment of the sum involved, but those who are granted bursaries are required to enter into an agreement to serve the State (either in the Department of Health or under a Hospital Board) for a period up to a maximum of five years, according to the duration and amount of the bursary. The bursar graduates will therefore form the nucleus of the whole-time salaried service.

"Every man should have a cemetery large enough to bury his friend's mistakes".
—The Friendly Messenger

GENERAL NEWS

Income of Dentists

Dentists earn less than certified public accountants and consultant engineers, according to a report of the National Bureau of Economic Research, U. S. A. Professional workers in independent practice earn nearly four times as much as non-professional workers, according to a study made for the bureau by Milton Friedman, University of Minnesota, and Simon Kuznets, University of Pennsylvania. All professional workers, both salaried and independent, earn two to three times as much as non-professional workers, the bureau reported.

—N. Y. *Jour. of D.*

Hygienists

A bill has been passed by the N.Y. State Legislature appropriating \$3,000,000 for the establishment of schools of a technical nature in a field in which there is a great shortage. The State Department of Education was able to show that the training of dental hygienists came into this category and plans are progressing for courses to start this fall. Tentative plans are being made to begin such schools at the Guggenheim Clinic in New York City, the University of Buffalo, and possibly St. Lawrence University. Thirty students will be admitted to each class; the course will be a year in duration; it will be tuition free.

South Carolina Passes New Law on Dental Laboratory Technicians

A law calling for compulsory registration of dental laboratory technicians has been passed by the South Carolina state legislature.

The measure provides that a registered technician must be at least 21 years of age, and an apprentice at least 16, and that each pass an examination conducted by the state board of dental examiners, with examination fees set at \$25.00 for technicians and \$5.00 for apprentices.

It prohibits an apprentice from operating a dental laboratory and provides that he must have worked under supervision of a registered technician for a three-year period before he may become a registered technician.

Certificates of registration may be refused, suspended or revoked for any of the following reasons: (1) gross mal-practice or gross in-

competence; (2) advertising by means of knowingly false or deceptive statements, to the profession; and (3) accepting any work from the general public.

Dental technicians employed by dentists in their private offices on a salary basis are exempt from provisions of the act.

Presentations to Sir Frank Colyer

On September 25, Sir Frank Colyer of Britain celebrated his eightieth birthday and it has been decided to mark the occasion by presenting him with his portrait. Those who desire to be associated with this presentation should send their contributions to Mrs. Thurston, Brentknoll, Radlett, Herts, England. Envelopes should be marked "Sir Frank Colyer Fund". It is proposed to devote the surplus of the Fund to the development of the Odontological Museum of the Royal College of Surgeons to which Sir Frank has for so long devoted so much of his time and energies.

Sir Frank's pen has enriched clinical and scientific dental literature and in appreciation of his sixty years of tireless and high endeavour it is proposed to make this gift.

Opium and Narcotic Drug Act as of July 23, 1946

Parts of this Act affecting dentists are as follows: Any dentist who prescribes, administers, gives, sells, or furnishes any drug to any person, or who signs any prescription or order for the filling of which any drug is required unless such drug is required for medicinal purposes in connection with his practice as a dentist, shall be guilty of an offence, and shall be liable upon indictment to imprisonment for any term not exceeding five years and not less than three months, or upon summary conviction to a fine not exceeding one thousand dollars and not less than two hundred dollars, or to imprisonment with or without hard labour for a term not exceeding eighteen months, or to both fine and imprisonment.

Every dentist shall on request furnish the Minister with any information which he may require under any regulation made under this Act and where any person is charged with an offence the burden of proof shall be upon the person charged.

Newspaper Dental Columns

The Chicago Sun is to be congratulated upon being the first metropolitan newspaper to carry an exclusive dental column. This column is written by Doctor Flores van Minden and appears three times a week.

It is time that other newspapers followed this good example as people need to know more about dental health.

Course in Pedodontics

The University of Illinois is establishing this fall a complete graduate course in pedodontics. This course will lead to a master's degree.

"One out of every five adults who need dental attention gets it, whereas only one out of approximately twenty-five children who experience teeth difficulties is treated," Dr. Maury Massler, the Supervisor, points out.

This is explained partly by the negligence of parents, but mostly by the almost complete lack of child dental specialists. The general practitioner has not been trained to handle children, and their dental care has not been lucrative.

It is estimated that one trained pedodontist can take care of the teeth of as many children as approximately twelve general practitioners.

"Baby teeth must be preserved and taken care of," Dr. Massler warns, "first, to eat with, and second, to allow permanent teeth to come in correctly. The best early treatment is the practice of prevention."

Treatment of Subacute Bacterial Endocarditis with Penicillin:

Second Report

by M. H. Dawson and T. H. Hunter, Ann. Int. Med. 24:170, February, 1946.

Thirty-five cases of subacute bacterial endocarditis have been treated with penicillin. The group includes fifteen new cases and a follow-up study on seventeen of the twenty patients previously reported.

Of thirty-five patients, thirty are alive and apparently cured of the infection. The average follow-up period has been fourteen months.

Some patients have required large doses of penicillin, in one case 92,000,000 units in repeated courses.

The role of heparin as an adjunct to therapy is discussed and the opinion is expressed that in most cases its use is inadvisable.

The importance of large daily doses for periods of two to three weeks is stressed. With persistent therapy, a cure should be possible in the majority of cases in which the infecting organism is penicillin-sensitive.

—Paul H. Keyes.—*Jour. of A.D.A.*

Urge Technician Training in U.S.A. to Meet Personnel Needs

In a move to meet an immediate need for trained auxiliary dental personnel, the Prosthetic Dental Service Committee of the American Dental Association passed a resolution at a meeting in New York June 29, urging endorsement of technician training in dental schools.

The resolution specified that the training period be for a minimum of two years and that it lead to a certificate rather than a diploma.—*Jour of A.D.A.*

Infected Teeth and Arthritis

Removal of infected teeth or tonsils is not always helpful in the treatment of arthritis and other rheumatic diseases according to Dr. Richard H. Freyberg in the Journal of the American Dental Association.

Dr. Freyberg, professor of clinic medicine at Cornell University Medical College, condemned the common practice of removing teeth of rheumatic patients without first determining if the patient has a disease due to localized infection.

The first consideration, Dr. Freyberg said, should be whether the patient has arthritis or some condition that simulates it.

Pointing out that dentists recognized the limitations of removal of points of focal infection earlier than did physicians, he said:

"Unfortunately too many physicians, if the tonsils have already been removed, assume that if there are some teeth present, they must be the cause of the arthritis. The patient is then sent to the dentist to have the teeth extracted.

"It is deplorable that teeth are being removed just because they are still in the mouth of the patient with rheumatoid arthritis. This practice should be stopped!"

Dr. Freyberg said that infection has no direct relationship to osteo (bone)-arthritis so that removal of localized infection could not possibly benefit this prevalent form of chronic arthritis.

He listed two considerations which should determine treatment:

1. Just as a person without rheumatic disease should have absessed teeth or infected tonsils removed, so should the patient with rheumatoid arthritis.

2. By removal of such infected tissues, the patient's general health might be improved and thereby his ability to combat the arthritis might be indirectly facilitated. The patient should be warned that removal of foci will not be of direct value as treatment for his arthritic disease.

Dr. Freyberg said that analysis of reports that a large percentage of patients with rheumatic disease were benefitted by removal of infected tonsils or teeth indicated that most of the patients did not have arthritis but had some other disease which would have improved regardless of the type of treatment.

Note from Office of Pharmacal Information of U.S.A.

Drugs such as aspirin, cold tablets and sodium bicarbonate, are being shipped to Europe in quantities totalling millions of dollars. The Russians wanted and got 5,000 pounds of aspirin and 40,000 pounds of vaseline and half a million cold tablets. Aspirin, which reportedly is fetching \$75 for 50 tablets in Vienna, is in demand everywhere. The heavy emphasis on starch is one reason why all antacids are in demand. Many people now are also suffering from an excess of hydrochloric acid in the stomach, common accompaniment of prolonged strain and worry. Poor diet and lack of soap and water have brought on many skin troubles, hence the need for unguents. Grippe and flu rage among people who are underfed and inadequately clothed and crowded into damp unheated houses. The doctors with more than they can do to treat the most desperate illnesses ask for inhalants and tablets and cough medicines to give to those who are still capable of treating themselves.

Health on Credit

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Believers in a brisk cash-on-the-barrelhead attitude among doctors won't take much comfort from a Newark dentist whose no-money-down advertising threatens to rival that of the cut-rate furniture trade. Unsolicited credit cards from the "Friendly Dentist" appear to offer Jersey citizens everything except a trade-in value on their old teeth.

Two years to pay, no references, no down payments, no investigations, no third party, no finance charges, no embarrassing questions, no red tape, his dental broadside promises. "Your word is good," he states flatly. "Remember, dental care is so essential to a pleasing personality."

Health on credit may be all right, but it doesn't reflect very happily on the profession when the credit is stressed rather than the health. However, Newark's dentist will no doubt continue on his genial way, developing pleasing personalities by the score. Just as physicians who take businesslike collections for granted will go on proving how talented they are, not how trusting.

Mouth Washes

Pure water is the best mouth wash, the Council on Dental Therapeutics of the American Dental Association reported in the July issue of the A.D.A. Journal.

"Pure water will fulfil the most important requirements as a mouth wash," the Council declared. "It is superior to flavoured and medicated mixtures in many respects. The patient is already accustomed to the flavour of water and therefore it is not necessary to convince him that it tastes good; it is cheap, stable and readily available; and it is non-irritating and otherwise harmless, even if swallowed. Nobody is allergic to pure water, but flavoured or medicated mixtures may produce allergic reactions in sensitive persons."

"Next best to plain water as a mouth wash is a saline solution prepared by dissolving two teaspoonsful of table salt in one quart of distilled water. Medicated mouth washes should be used only when prescribed by the dentist or physician, the Council recommended."

42 Dental Hygienists Complete Studies at Columbia University

Forty-two students in the dental hygiene class of the School of Dental and Oral Surgery, Columbia University were graduated at convocation.

\$1,000,000 Structure to House Temple School of Dentistry

The School of Dentistry, Temple University, will be housed in a \$1,000,000 building at Broad St. and Allegheny Ave. in the heart of Philadelphia by September, 1947.

IN MEMORIAM

Frederick William Broderick, L.R.C.P.

London, M.R.C.S., L.D.S., Eng. of Bournemouth, England, died August 19. He first advanced the theory that caries and pyorrhea were opposite and distinct diseases, both being the result of general rather than local causes. His conclusions were challenged by many leading authorities but he held to his convictions to the end. Much more work is required on this subject.

He was graduated from the School of Dentistry of the Royal College of Dental Surgeons in 1923. He served in the Canadian Army in the First Great War.

He was a member of Detroit Dental Society, Walled Lake Rotary Club, and the Fraternal Order of Eagles.

Dr. March is survived by his widow and one son, Lieutenant William March.

Harry E. Hobbs, of Toronto, Ontario, aged 51, died on August 28, following a heart attack while on a fishing trip on Lake Nipissing.

He was graduated from the School of Dentistry of the Royal College of Dental Surgeons in 1923. Since graduation he practised in Toronto.

Harry Hobbs was a football enthusiast. He was quarterback on the University of Toronto senior team when it won the Canadian Championship in 1923. He coached the Balmy Beach team to win the Dominion title in 1927. Later he coached the Varsity team.

He was a veteran of the First Great War, serving in the Fifty Third Battery. He served as President of the Downtown Dental Association 1937 and was a member of the Toronto Academy of Dentistry Council in 1938.

Dr. Hobbs is survived by his widow and one son, David.

William Reginald Reynolds, of Toronto, Ontario, died suddenly September 10. He was graduated from the Faculty of Dentistry, University of Toronto in 1922 and had practised in Toronto since that time. He was a member of Oakwood Lodge, A.F. and A.M.

Dr. Reynolds is survived by his widow, a son, Dr. Clifford Reynolds of Toronto, his mother and two brothers.

Kenneth McLeod McVey, of Toronto, Ontario, aged 59, died on August 25.

He was graduated from the School of Dentistry, Royal College of Dental Surgeons in 1909. He practised in Chester-ville for one year and moved to Toronto in 1911 where he practised until the time of his death.

Dr. McVey is survived by his widow, his mother, one brother and three sisters.

Harry M. March, of Walled Lake, Michigan, died suddenly in his office on August 12.

Dr. Dwight Mason Turner, of Oakville, Ontario, aged 46, died suddenly in his office August 26, of a heart attack. He was graduated from the Royal College of Dental Surgeons of Ontario in 1922. He practised dentistry in Hamilton until December 1942, when he moved to Oakville.

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Soixante Suggestions Pratiques pour le Chirurgien*

par GEORGES A. MORGAN, D.D.S., Toronto, Ont.

Cette communication est fondée sur sept principes fondamentaux, à observer, pour réussir votre travail chirurgical. Vous devez prendre le temps de:

- 1°: Observer l'état général de vos patients.
- 2°: Bien étudier votre champ opératoire.
- 3°: Toujours radiographier la région intéressée.
- 4°: Mettre en relation vos observations cliniques, l'étude de vos radiographies et l'histoire de cas du patient.
- 5°: Donner les médicaments nécessaires avant toutes les extractions multiples et tous les cas difficiles.
- 6°: Se confiner, dans l'intervention, à la moitié du maxillaire ou de la mandibule.
- 7°: Faire des lambeaux dans tous les cas difficiles; suturer quand nécessaire; toujours prescrire une médication post-opératoire; voir votre patient, le deuxième jour après l'opération.

OBSERVATION DU PATIENT

Personne n'attend, du praticien général et même du spécialiste, un examen général du patient. Toutefois, il est

facile d'obtenir, et assez rapidement, les informations les plus importantes par un questionnaire intelligent et une observation bien attentive. Il y a certaines maladies, qui se reconnaissent au premier coup d'oeil, telles, le diabète, l'hyperthyroïdisme, les signes buccaux des différentes anémies, les maladies des enfants et diverses infections dermatologiques, la gingivite, appelée pyorrhée de la grossesse, le diagnostic différentiel entre la ligne bleue causée par une maladie professionnelle, et celle causée par un traitement syphilitique trop intensif. Voilà des problèmes, qu'un praticien général peut reconnaître par une lecture intelligente de la littérature dentaire, par son expérience pratique, et une histoire de cas pré-opératoire faite attentivement.

OBSERVATION DU CHAMP OPERATOIRE

Le cas le plus sérieux, que le praticien général rencontre est le traitement d'une affection locale aiguë. Doit-on extraire la ou les dents malades, en présence d'une infection alvéolaire aiguë? Voilà un problème, qui se pose périodiquement à tout dentiste. Dans ces cas, nous croyons qu'il est ordinairement plus prudent d'intervenir, si le patient est vu en dedans de vingt-quatre heures après l'apparition de la douleur; plus tard, et en présence de gonflement, l'extrac-

*Conférence présentée à la Société Dentaire de Montréal, le 8 Mars 1946.

tion ne donnera pas grand bénéfice et le risque peut être grand.

Dans presque tous ces problèmes, la radiographie est inappréciable. Elle vous aidera à diagnostiquer une infection de la dent ou de l'os. La plupart des cas d'ostéomyélite, qui me sont référés par des dentistes, sont le résultat d'une intervention faite pendant la période aiguë, quand l'infection est répandue dans les tissus environnants. On peut remédier à cet état, par l'application de chaleur humide, l'absorption de liquides, le contrôle de l'élimination, l'emploi de sédatifs appropriés pour contrôler la douleur, de sulphamidés pour contrôler l'infection, par le courant sanguin. Le plus récent de ces médicaments, le sulphamérazine, sera d'un grand secours dans la plupart des cas. Dès que l'infection aiguë est localisée, lancer et drainer; plus tard, vous pourrez extraire les dents, sans danger.

Une périoronite aiguë des troisièmes molaires, là où l'infection a atteint la structure osseuse environnante, exige l'application de chaleur; la fissure doit être exposée et irriguée avec un antiseptique doux, jusqu'à ce que l'inflammation aiguë soit résorbée et la douleur disparue.

Dans presque tous les cas où la chaleur est indiquée dans la région de la troisième molaire, la méthode la plus satisfaisante de l'appliquer, c'est de suspendre un sac d'eau chaude, l'extrémité du tube placée sur la région infectée, la tête penchée au-dessus d'un bassin, l'eau tiède pouvant circuler sur l'endroit indiqué. Incidemment, c'est une bonne méthode pour faire le rinçage de la gorge.

TYPES DE PATIENTS ET DE DENTS

Méfiez-vous des gens à visage carré. Ils ont généralement une articulation bout à bout et par conséquent des os denses, qui compliquent l'extraction. Les dents entourées de pyorrhée, chez ces patients, sont difficiles à extraire.

Prémolaires et molaires. Dans les types à visage long et ovale, ces dents

suivent généralement le contour facial; leurs racines sont longues et fragiles et par conséquent aisément fracturées. La racine buccale de la première prémolaire supérieure est souvent brisée, laissée "in situ" dans ce type de visage.

Les petites couronnes—ont généralement de grosses racines.

Les dents en malposition—sont généralement entourées d'os très dense. Une intervention chirurgicale élaborée, en présence de pyorrhée aiguë, n'est pas à conseiller et peut entraîner des séquelles post-opératoires sérieuses.

L'ouvrage de Crile sur les chocs est d'un intérêt spécial pour le dentiste, qui doit prévoir le cas, où les suites dues à ses interventions sont quelquefois plus graves et plus redoutées par le patient, que celles de certaines opérations plus graves, tel l'accouchement.

Il est vrai qu'un travail chirurgical identique n'affecte pas tous les patients au même degré, même si leur état général paraît semblable. Par conséquent, il est nécessaire de déterminer le risque dans chacun des cas douteux. On doit commencer par intervenir, en se confinant à un quart de la bouche. L'anesthésie est ainsi limitée, le choc diminué. Par exemple, dans le quart supérieur droit, il peut y avoir deux prémolaires qui peuvent être enlevées beaucoup plus facilement qu'une première molaire inférieure ou une troisième molaire incluse. En faisant d'abord l'opération la plus bénigne, on gagne la confiance du patient et on augmente la tolérance à l'infection. Une bonne règle à suivre est de limiter l'extraction à un côté de la ligne médiane, pour permettre au patient d'avoir la moitié de la bouche libre; l'extraction de l'autre côté peut se faire, quand le côté opéré est guéri. Des opérations plus élaborées peuvent se faire, si le patient est hospitalisé. La date de la deuxième intervention nous est fixée par l'état du patient, le troisième jour après la première opération. S'il n'y a pas de réaction notable, le troisième jour, le reste des dents malades peut être enlevé à la convenance du

patient et du chirurgien. S'il y a réaction, le troisième jour, (hausse de température, perte de sommeil, etc.) la deuxième extraction doit être retardée d'au moins sept jours, pour permettre la formation d'anticorps, résultant de l'inflammation causée par la première extraction.

RADIOGRAPHIES PRE-OPERATOIRES

Le patient et l'opérateur ont droit d'exiger une radiographie avant toute intervention chirurgicale dans la bouche, même si cette intervention semble bénigne. Chez les enfants, la radiographie indiquera la position des couronnes des dents permanentes et leur relation avec les dents temporaires. Ne vous imaginez pas que l'avulsion des dents temporaires est une opération facile et sans importance; une extraction négligente de dents temporaires a, dans plusieurs cas, occasionné des malformations qui durent toute la vie. La radiographie, l'histoire de cas et les signes cliniques sont la base d'un diagnostic pré-opératoire dans tous les cas importants de chirurgie. Dans des cas douteux sur des constatations anatomiques, il est à conseiller de prendre des radiographies de la même région, mais du côté opposé.

PREFERENCE DE L'ANESTHESIE LOCALE

L'extraction des dents demande l'anesthésie locale ou l'anesthésie générale. Certains dentistes préfèrent une anesthésie particulière, soit que leur technique exige l'une ou l'autre, soit que leur expérience les ait habitués à une méthode plutôt qu'à une autre. De bons résultats peuvent être obtenus également avec différents anesthésiques, selon l'opérateur qui les emploie. Le choix d'un anesthésique peut paraître indifférent si les résultats sont identiques. Nous conseillons cependant l'anesthésie locale en toutes circonstances, excepté pour ces cas que nous appellerons "extraction en masse". Les facteurs qui justifient notre préférence sont:

- 1°: contrôle d'hémorragies;
- 2°: rapidité de l'opération;
- 3°: sauvegarde du patient;
- 4°: personnel restreint;
- 5°: crêtes moins déchiquetées;
- 6°: réaction post-opératoire amoindrie.

ANESTHESIE

Une injection est mieux tolérée par le patient quand celui-ci est dans une position horizontale. La plupart des injections données par le dentiste sont cependant administrées à des patients assis dans une position verticale ou quasi-verticale. Tous les malades, qui présentent une histoire de réaction défavorable à l'injection, devraient être couchés dans le fauteuil. Il en est de même des patients qui offrent de mauvais risques chirurgicaux. Les solutions anesthésiques doivent être à la température du corps et injectées lentement.

Les faillites d'anesthésie sont dues, dans certains cas, à une mauvaise technique du dentiste, qui injecte au mauvais endroit. Toutefois, cet échec est causé souvent par l'agent anesthésique lui-même, surtout lorsqu'il s'agit de l'insensibilisation d'un tronc nerveux considérable. On a cru, un certain temps, qu'une solution d'hydro-chlorate de procaine d'une concentration supérieure à 2% était dangereuse et pour ce, jamais employée. Pour la même quantité, une solution à 3 ou 4% produit une anesthésie plus profonde dans des cas difficiles. Une anesthésie en profondeur dépend généralement de la concentration, non de la quantité de la solution injectée. La concentration doit être en proportion du volume de la branche nerveuse à insensibiliser. Le degré d'anesthésie est aussi influencé par la sensibilité des terminaisons nerveuses; c'est pourquoi la préparation des cavités sur des dents hypersensibles et l'extraction de dents douloureuses à la percussion, exige l'emploi d'une solution plus concentrée.

La tolérance à l'adrénaline dépend généralement de l'obésité du patient

Par exemple, on s'attend à ce qu'un patient obèse réagisse moins bien à l'adrénaline qu'un patient maigre. La dose maximum de novocaïne avec adrénaline, qui peut être injectée aux adultes qui ont déjà pris un barbiturique, (par exemple, $1\frac{1}{2}$ grain de nembutal), est d'environ 25cc, d'une solution à 2%.

L'infiltration plutôt que le blocage du nerf est la méthode de choix, parce que, par l'infiltration, on obtient une anesthésie plus profonde avec la même solution anesthésique et le champ opératoire est plus sec. Le blocage de la deuxième division du trijumeau (ou sous-orbitaire) est rarement indiqué pour l'extraction de dents normales au maxillaire supérieur. Pour les canines ébranlées et pour les tumeurs qui s'étendent jusqu'à la paroi antérieure du sinus maxillaire, il est généralement nécessaire de bloquer l'une ou l'autre de ces branches nerveuses. L'avulsion des dents inférieures exige l'anesthésie du nerf dentaire inférieur, parce que la densité de la couche osseuse corticale ne permet pas l'infiltration adéquate de la solution, à l'exception possible de la région des incisives.

Plusieurs de nous ont demandé quelle sorte d'injection nous donnons et quel anesthésique nous utilisons. Pour être franc, si l'injection est bien donnée, la faillite de l'anesthésie est due à un mauvais jugement chirurgical. Pour les troisièmes molaires inférieures, nous employons la solution de Cooke-Waites, la Novocaïne, la Pontocaïne—Cobefrin pour toutes les injections linguales ou au maxillaire inférieur, et la solution Cooke-Waites no 4, (qui contient 1/25,000 partie d'adrénaline) pour toutes les injections prolongées de la bouche, et les autres infiltrations. La première nous donne une anesthésie rapide et prolongée, la seconde, un bon contrôle hémorragique du champ opératoire.

Le bon sens nous conseille l'usage d'une aiguille différente pour chaque nouvelle injection. S'il est vrai en théorie, que les bactéries peuvent être

transportées d'une région à une autre, et nous le croyons, nous pouvons raisonnablement attribuer quelques uns de nos troubles post-opératoires à la transmission directe de bactéries d'une région infectée à une région saine. Je suggérerais alors, si vous avez à extraire une première molaire supérieure infectée par exemple, d'employer deux seringues, une pour votre infiltration buccale et une pour votre injection linguale.

MEDICATION PRE ET POST-OPERATOIRE

L'usage routinier de prémédication pour l'extraction des dents n'est probablement pas nécessaire; toutefois, nous la considérons comme une auxiliaire désirable et la donnons régulièrement à nos bureaux dans tous les cas. En dépit de l'adresse de l'opérateur, l'impression du patient dépend de l'habileté du chirurgien dentaire à éviter la tension nerveuse. L'élimination de la peur et de l'appréhension par la prémédication est ainsi une source de satisfaction, pour le patient et le chirurgien. Une grande part du malaise, pendant l'extraction des dents, est due à l'acuité de la douleur. Il est mieux d'employer une petite dose et la répéter toutes les demi-heures que de donner une trop grande dose. Un demi-grain de codéine ou plus peut être donné, ce qui correspond à un huitième de grain de morphine. Le mélange de cinq grains d'aspirine et de $\frac{1}{2}$ grain de codéine, en capsules ou tablettes, pris par la bouche a été trouvé plus effectif que le sédatif seul, et ordinairement, donne de bons résultats, là où l'un des deux seulement serait insuffisant.

Parmi les hypnotiques, le nembutal, un barbiturique, est très satisfaisant comme médicament pré-opératoire. Le remède cependant doit être donné dans votre bureau. Après l'opération, le patient ne doit en prendre que lorsqu'il se met au lit. Il a un effet prolongé en dose de trois grains ($\frac{1}{2}$ grain pour les enfants). Nous ne pouvons pas espérer un bon succès opératoire sans Nembutal. L'application locale de médicaments

soulage très souvent. Les régions sérieusement traumatisées et les plaies étendues doivent être lavées avec une solution alcaline.

L'hémorragie post-opératoire est, sans contredit, une plus grande cause d'ennuis pour le patient, et souvent aussi, pour le dentiste, qu'aucune des autres suites de la chirurgie dentaire. Une pression moyenne appliquée sur l'alvéole, à la suite d'une extraction, est ordinairement suffisante, si le temps de coagulation et de saignement est normal. Un tampon de gaze stérile pour remplir l'ouverture formée par l'extraction de la dent est mouillé et placé sur l'alvéole qui saigne.

La pression exercée par les dents antagonistes tient la gaze en position. Après avoir été ainsi contrôlée pendant quinze à vingt minutes, l'hémorragie sera ordinairement arrêtée. Le processus peut être répété, le tampon saturé de coagulants ou de vaso-constricteurs, si on le désire. Le fait de mouiller le tampon prévient l'absorption du sang et le caillot, qui se forme dans l'alvéole n'est pas dérangé quand le tampon est enlevé. Le chlorure d'adrénaline est un vaso-constricteur très effectif. L'œdème dur qui persiste après l'extraction dentaire traduit généralement un processus de phlegmon.

Il y a généralement élévation de température et le patient est plus ou moins intoxiqué, dû à l'absence de drainage. Le traitement de ces cas consiste à radiographier d'abord la région pour déterminer si l'os est atteint; le patient devrait être hospitalisé, si possible, et une attention spéciale doit être portée à l'élimination et à l'évacuation des fluides de l'organisme. Des compresses humides chaudes et des gargarismes hâtent la localisation de l'infection. Cette infection localisée, un drainage adéquat par l'ouverture alvéolaire est suffisant dans la plupart des cas. S'il n'est pas suffisant, on doit pratiquer une ouverture externe et la maintenir ouverte par des mèches ou des tubes de caoutchouc. Une enflure et une ankylose persistantes donnent une bouche malpropre. L'ingestion de nourriture molle et une négligence à garder sa

bouche propre amènent une gingivite ou une stomatite aiguë. Des rinçes-bouches alcalins chauds et des badigeonnages avec une solution tiède de permanganate de potasse (1 pour 1000) sont recommandés pour l'hygiène de la bouche de ces malades. Le maintien d'un bon drainage est d'une importance capitale quand l'ostéomyélite est à craindre. Un des symptômes importants de cette affection est l'ébranlement des dents. Dans ce cas, on doit user de prudence quant à l'extraction, car ces dents se stabiliseront et reprendront leur état normal avec la guérison de l'ostéomyélite. Les séquestres doivent être enlevés avec soin, seulement quand ils se sont détachés du corps de l'os.

Le traitement des alvéolites ("dry socket") se fait en plaçant dans l'alvéole une boulette de coton imbibée d'eugenol, recouverte par une gaze enduite d'Ozonol. Ce traitement renouvelé tous les jours, durant trois jours, me paraît la façon la plus effective de soulager la douleur. Après trois jours, on chauffe de l'Ozonol pour le liquéfier et on le place dans la cavité, une fois par semaine, durant trois semaines. Quand une racine de dent est brisée à un niveau inférieur à celui du bord supérieur de l'alvéole, on ne doit pas se servir de davier ou d'élévateur sans précautions. Un tel processus occasionne un traumatisme inutile.

Dans presque tous les cas, la méthode du lambeau pour l'extraction d'une racine est préférable à toute autre; elle procure une bonne vue du champ opératoire et minimise le traumatisme. Tous les cas, qui exigent une perte de substance osseuse nécessitent l'ablation de l'os d'abord et ensuite celle de la dent.

CURETAGE DES ALVEOLES

Le curetage des alvéoles doit être limité à l'énucléation des kystes et des granulômes organisés, susceptibles de devenir des kystes épithéliaux. Le curetage des alvéoles de dents atteintes d'inflammation aiguë est absolument contre-indiqué.

PANSEMENTS

L'emploi habituel de pansements ou de médicaments dans toutes les alvéoles n'est pas nécessaire, le meilleur pansement est le caillot sanguin normal. Un drain de gaze renfermant ou non des médicaments, placé dans une alvéole, doit y être maintenu plusieurs jours. Les médicaments d'usage courant, après une extraction, sont: le Sulphathiazole (sous forme de Sulfapac), l'Abbocillin, le Dextrox.

Les nodules pulpaire ou l'hypercémentose ne peuvent occasionner des désordres organiques. Les extractions des dents, pour ce motif, sont inutiles.

On s'entend, presque partout, pour croire que les dents ne doivent pas être extraites en présence d'angine de Vincent aiguë.

Il est à conseiller de discuter avec le patient des complications possibles, mais sans l'alarmer sans nécessité. Les précautions ordinaires, dictées par le bon sens, doivent être prises. Le patient hyperthyroïdique est un mauvais risque anesthésique et chirurgical. Les diabétiques demandent des soins pré-opératoires bien suivis et un travail chirurgical bien soigné. De plus, les diabétiques, qui souffrent d'infection respiratoire aiguë, ne doivent pas être opérés. Un examen radiologique post-opératoire est de mise pour tous les cas difficiles:

1) le patient doit être persuadé que la partie difficile de l'opération a été faite avec succès; cette façon de procéder aidera le patient à attendre plus courageusement le délai de la guérison, de l'inflammation et des ennuis, qui suivent l'opération.

2) il fera de vous un opérateur meilleur et plus habile.

3) il vous donnera un dossier plus complet du cas et justifiera vos honoraires.

Prenez soin de vos patients après l'opération et votre clientèle prendra soin d'elle-même.

SUGGESTIONS CONCERNANT LE PATIENT

- 1) Radiographiez tous les cas
 - a) supports à radiographies

- b) marques d'identification pour les films
- c) pinces et supports nickelés
- 2) Gaze pour la bouche
 - a) grosses éponges
 - b) petites éponges
 - c) rouleaux de coton pour extraction simple
- 3) Cônes de glace pour vérifier la vitalité des dents
- 4) Thermomètre
- 5) Kleenex
- 6) Médicaments
 - a) capsules d'ammoniaque B. & W.
 - b) Nembutal 1½ gr.
 - c) Aspirin—Codéine, 5 & 1 gr.
 - d) Phenerol, Zephiran
 - e) Sulfapac (Abbott), Dextrox
- 7) Sac à glace, pour appliquer sur les régions traumatisées, durant 1½ heure.

SUGGESTIONS POUR LES DENTS

- 1) Latérales: luxer avant de faire la rotation.

Canines: faire la rotation vers la ligne médiane, à cause de l'inclination distolinguale de l'apex de la dent

Toutes les dents postérieures: les ébranler avant de les luxer.

- 2) Dents dévitalisées: faire des lambeaux

Racines à forme capricieuse: faire des lambeaux

Dents de sagesse incluses: faire des lambeaux

La première condition d'une bonne intervention est une bonne vision du champ opératoire.

- 3) Ayez des instruments bien tranchants, des ciseaux avec des biseaux longs et avec des manches longs; bistouris avec de longues poignées.

SUGGESTIONS POUR LE DENTISTE

- 1) Mains: gants de caoutchouc
- 2) Yeux: lunettes
- 3) Pieds: chaussures de caoutchouc
- 4) Bouche et nez: portez un masque.

Suite 419, Medical Arts Bldg.,
170 rue S.-Georges,
Toronto.

CHEZ NOUS ET AILLEURS

Société de Stomatologie de Québec

Les membres du Comité Exécutif de la Société de Stomatologie pour l'année 1946-1947, élus à réunion du 2 juillet 1946, sont les suivants: Président: Rodolphe Talbot; Vice-Président: Antonio Reny; Secrétaire-Correspondant: Jules Hamel; Bibliothécaire: R. Huot; Secrétaire-Trésorier: Emile Bourdon.

La Société de Stomatologie se propose une année fructueuse et remplie d'intérêt pour ses membres.

Octroi Annuel à l'A.D.C.

Les provinces de la Nouvelle-Ecosse et de l'Île du Prince-Edouard augmentent leur octroi annuel à l'Association Dentaire Canadienne. Cette cotisation, qui était de \$4.00 par année, sera de \$5.00, à partir de cette année. Ces provinces, à l'exemple de l'Ontario, reconnaissent ainsi l'excellent travail accompli par l'Association, dans tous les domaines couverts par la profession dentaire du Canada.

Mémorial de Guerre de l'A.D.C.

A date du 22 juillet 1946, le total des sommes souscrites par les différentes provinces pour le Mémorial de Guerre de l'Association Dentaire Canadienne est le suivant: Colombie Britannique, \$500.00; Alberta, \$814.00; Saskatchewan, \$902.00; Manitoba, \$500.00; Ontario, \$1,637.50; Québec, \$1056.00; Nouvelle-Ecosse, \$522.00; Nouveau-Brunswick, \$340.00; Île-du-Prince-

Edouard; \$0.00; Intérêts: \$5.59; Grand total: \$7,277.09.

Comme on le sait, ces fonds seront distribués aux cinq facultés dentaires du Canada, pour couvrir les frais de scolarité d'étudiants en Chirurgie Dentaire.

Collège des Chirugiens-Dentistes

Les gouverneurs du Collège des Chirugiens-Dentistes de la Province de Québec, nommés pour un terme de deux ans, ont tous été élus par acclamation, le 29 juillet 1946. Voici leurs noms et leur division respective:

Division de Montréal-Est: Les docteurs C. Archambault, C. A. Contant, Claude de Grandmont, Jacques Demers, Victorien Dubé, J. Armand Fortier, J. Maurice Gosselin, Yves Lafleur, Adolphe L'Archevêque, fils, Gabriel Lord, le lieutenant-colonel P. Manseau, Albert Surprenant et Ephrem Vinet.

Division de Montréal-Ouest: Les docteurs J. W. Abraham, G. G. Armitage, J. K. Carver, W. E. Charland, M. L. Donigan, C. I. Finklestein, Denis Forest, O. A. Lefebvre, J. W. Morton, N. Solomon.

Division de Québec: Les docteurs L. P. Goulet, D. Viger Plamondon, Gustave Ratté, D. Roy.

Division des Trois-Rivières: Les docteurs M. Lafontaine et R. Trudel.

Division de S.-François: Les docteurs Valmore H. Olivier et H. T. Southworth.

EXAMEN & DIAGNOSTIC

De nos jours, le domaine du dentiste doit couvrir non seulement le soin des dents mais aussi la découverte, le diagnostic et le traitement de plusieurs lésions de la cavité buccale. Trop souvent, l'examen dentaire se limite aux dents et trop souvent, il n'inclut pas la recherche d'autres états pathologiques, qui mettent en danger la santé du patient. J'espère convaincre les dentistes de cette nécessité, de penser en termes pour le bien-être du patient, au lieu de penser en termes dentaires. La profession dentaire doit accepter ses responsabilités dans sa pleine limite au sujet des néoplasmes malins et autres affections de la bouche. Le dentiste a l'occasion de découvrir ces tumeurs avant le médecin et l'identification précoce de ces lésions pathologiques est d'une extrême importance pour le bonheur et le bien-être futur du patient.

—Chalmers J. Lyons, J.A.D.A., janvier 1933, par *Journal of Oral Surgery*, avril 1946.

REVUE DES REVUES

"Anesthésie du nerf maxillaire inférieur, au niveau du trou ovale par voie buccale", par François Barri.

L'auteur préconise l'emploi de cette technique* pour l'anesthésie du nerf maxillaire inférieur, de préférence à 1) *l'infiltration*, qui a les inconvénients: a) d'exiger un pourcentage de vaso-constricteur dans la solution anesthésique; b) de provoquer une diffusion de l'infection dans les tissus avoisinants; c) d'occasionner une douleur assez grande au cours de l'injection dans un cas d'infection aiguë; 2) à *l'anesthésie générale*, dont on connaît les inconvénients; 3) à *l'injection à l'épine de Spix*, à cause de l'impossibilité fréquente d'obtenir une anesthésie complète, due à la présence du nerf buccal, qui est rarement anesthésié, au cours de cette injection; 4) à *l'injection extra-orale* du nerf mandibulaire, à cause de l'énervement causé par cette injection chez les patients.

L'injection au trou ovale a les avantages suivants: 1) anesthésie plus complète, plus étendue; 2) déposition de la solution à un niveau plus élevé, loin des infections les plus

souvent rencontrées; 3) utilisation, dans un cas de trismus; 4) une substance vaso-constrictrice est inutile; 5) relâchement des muscles masticateurs.

La technique décrite par l'auteur est la suivante: Aiguille—6 cm. de longueur, droite; marque sur l'aiguille à 4.5 cm. du bout, pour éviter d'enfoncer l'aiguille trop loin. Deux points de repère: 1) région vestibulaire apicale de la racine distale de la 2ième molaire supérieure; 2) bord supérieur du conduit auditif externe. L'aiguille est enfoncée dans la muqueuse recouvrant le 1er point de repère et dirigée d'en avant en arrière, de dehors en dedans, de bas en haut, en la dirigeant vers la protubérance occipitale externe. Une anesthésie traçante est faite durant la course, qui doit être à 200 de la ligne de Campère et doit s'arrêter à une profondeur de 4.5 cm. Il faut attendre une ou deux minutes pour l'insensibilisation. Cette technique ne présente pas de danger.

(La Revue Odontologique, 68e,
No 3, mars 1946)
G. DE M.

LES DENTISTES ET LA POLIOMYELITIS

Une cavité, dans une dent, est une porte ouverte à la poliomyélite. Voilà les conclusions d'un article de Hans Reese, neurologue de l'Université du Wisconsin et de John G. Frisch, D.D.S. de Madison, Wisconsin, publié dans le Dental Digest.

Cet avertissement confirme l'opinion médicale que les amygdalectomies et les extractions dentaires présentent plus de danger durant une épidémie de paralysie infantile. La raison d'être de cette croyance est la susceptibilité de l'infection à pénétrer dans l'organisme par les branches nerveuses exposées du nez et de la bouche et à cheminer le long de ces branches nerveuses jusqu'à la moelle épinière, où elle se localise. "La riche vascularisation nerveuse de la pulpe dentaire est un endroit idéal pour la pénétration du virus", disent les docteurs Reese et Frisch.

Les expériences suivantes prouvent leur déclaration:

- 1) à l'Université du Maryland, des chercheurs ont ouvert des dents, sur des singes, et ont introduit du virus de poliomyélite dans ces cavités. Tous ces singes contractèrent cette infection.
- 2) lors d'une épidémie, dans la Caroline du Nord, en 1944, les dents de 272 malades présentaient 2.6 plus de caries que des personnes en santé, en groupe comparable.
- 3) les habitants des villes, dont l'eau contient beaucoup de fluorine (fluorure de calcium) ont environ 75% moins de carie dentaire que les autres, où la fluorine est moins abondante. Les statistiques des Etats de l'Illinois, Indiana et Wisconsin, où l'eau est traitée à la fluorine, montrent que les cas de poliomyélite sont moins fréquents, dans une proportion de 22 à 34%.



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CHANGEMENTS DE LA PRATIQUE DENTAIRE

Dans le monde, tout change, rien n'est permanent. La lenteur des modifications de certaines habitudes de vie fait ressortir le rythme accéléré que suivent d'autres façons de faire. En termes humains, on nomme stables, les choses qui varient lentement, et transitoires, les choses qui se modifient rapidement. Rien ne demeure absolument stationnaire; l'harmonie de l'univers serait renversée. Tout sentier, tôt ou tard, a son tournant; le mal ne peut pas toujours triompher. Le bien aussi change d'aspect et le temps sert à effacer graduellement la mémoire des êtres aimés, que nous avons perdus.

La vision nette de la cadence des changements et l'évaluation précise de la mobilité des êtres et des choses sont indispensables à l'homme conscient de son existence.

Certaines personnes prévoient à l'avance des transformations imperceptibles dans le présent. Ces hommes sont des meneurs, dans toutes les sphères d'activité. Souvent ces visionnaires passent pour des individus encombrants; de tous temps, il y a toujours eu tendance à repousser les idées nouvelles et à s'accrocher aux vieilles choses. Cette attitude gêne et retarde l'adoption de concepts nouveaux. Une négation permanente est impossible. Le devoir de l'entreprise humaine est de constater les mutations constantes, rejeter les mauvaises idées et encourager les bonnes initiatives. Il est vrai qu'il y a chance d'erreur, et ce qui semble excellent aujourd'hui, peut être nuisible plus tard. Les grands esprits rejettent spontanément des idées, qui leur tiennent souvent à coeur, quand les faits se sont chargés de les classer comme néfastes.

La pratique de la chirurgie dentaire, évoluée, elle aussi. S'il en était autrement, notre profession cesserait d'être membre de la grande famille des sciences.

Le développement du service social, durant ces dernières années, a produit des changements dans certains de ses aspects. Les services techniques, auxiliaires de la dentisterie, ont subi un essor phénoménal. On peut se demander si une autre spécialité technique s'est épanouie avec autant de célérité, depuis quelque temps. L'horizon nous révèle d'autres modifications à venir dans l'exercice de la chirurgie dentaire. Comme toujours, ce sera un mélange de conceptions nuisibles et de suggestions excellentes. De toute façon, il faut que les organisations directrices de la profession dentaire adoptent des positions bien définies en face de ces changements de l'avenir. Les Ecoles dentaires doivent s'assurer de l'efficacité de leurs programmes d'enseignement pour répondre aux besoins de notre époque. La pratique de la chirurgie dentaire doit envisager clairement les changements sociaux, qui nous confrontent.

L'Association Dentaire Canadienne possède des comités spéciaux, qui s'occupent de l'étude de ces problèmes et qui sont à arrêter des solutions bien positives vis-à-vis ces questions. Les comités d'Education Dentaire, d'Assurance-Santé, des Services Auxiliaires, de la Dentisterie Industrielle, des Spécialités, approfondissent les rapports de la profession dentaire avec les conditions sociales présentes.

DON W. GULLETT

(lettre aux gouverneurs, No 12, 5 juillet 1946:)

LE SECRET PROFESSIONNEL

Voilà un sujet bien important.

En effet, des médecins et des dentistes qui, par ailleurs, étaient d'excellents praticiens, n'ont jamais pu établir leur clientèle dans un certain milieu, à cause de leur manque de discrétion. Et d'ailleurs, des médecins ou des chirurgiens-dentistes ont été poursuivis en dommages pour avoir violé le secret professionnel.

Mais, qu'est-ce que le secret professionnel?

C'est cette obligation de respecter et de conserver les confidences nécessaires, que le client a livrées au médecin et au chirurgien-dentiste dans l'exercice de sa profession.

Le secret professionnel a été reconnu par l'article 60 de la loi médicale de la province de Québec qui se lit comme suit:

"Un médecin ne peut être contraint de déclarer ce qui lui a été révélé à raison de son caractère professionnel."

Par le jeu de l'article 113 de la loi des chirurgiens-dentistes, ce privilège accordé aux médecins est aussi accordé aux chirurgiens-dentistes.

Il est des circonstances où toutefois le médecin peut être contraint de parler. Ainsi, dans les contrats d'assurance-vie, l'applicant ou assuré renonce généralement au bénéfice du secret professionnel en permettant à l'assureur de se renseigner auprès des médecins traitants pour compléter son enquête avant l'émission de la police et lors de la réclamation.

Pour votre sécurité personnelle vous pourrez toujours attendre un ordre du tribunal avant de révéler ce qui vous aura été confié sous le sceau du secret, à moins que permission vous ait été accordée par écrit, par la personne qui vous l'a confié ou ses ayants droit de divulguer l'information obtenue sous le secret professionnel.

PHILLIPPE BRAIS

(Cours de Jurisprudence, 1946, Faculté de Chirurgie Dentaire, Université de Montréal)

PROGRES REALISES EN CHIRURGIE BUCCALE, ANESTHESIE ET RADIOLOGIE

Depuis quelques années, le perfectionnement de l'anesthésie locale a aidé considérablement l'évolution favorable de la chirurgie buccale. Comme nous le savons, dès la fin de la Guerre Civile, on s'intéressait beaucoup à l'anesthésie locale, mais ce n'est que vers 1870 qu'un peu de progrès fut réalisé. "Cette science fut infusée de vie nouvelle par le travail de Koller, Schleigh, Robson et autres. Au Congrès d'Ophtalmologie, en 1884, à Heidelberg, Koller démontrait les propriétés anesthésiques de la cocaïne." Ce médicament devint vite populaire. Ses méthodes d'utilisation étaient rudimentaires et l'insensibilisation de la muqueuse provoqua plusieurs accidents, à cause de la toxicité de ce produit. Jusqu'à ce jour, on ne connaissait pas la façon de contrôler cet agent anesthésique dans les tissus et, une fois injecté, il se répandait dans le courant sanguin, produisant, à sa suite, une toxicité générale. De petites doses furent expérimentées, mais certains sujets étaient susceptibles, même à un faible dosage. Pendant que des chercheurs travaillaient sur des questions de quantité, Braun réalisait des expériences dans une autre direction.

Il croyait pouvoir combiner à la cocaïne une substance, qui tout en ne changeant pas ses propriétés anesthésiques, pourrait contracter les vaisseaux sanguins et prévenir sa dissémination dans l'organisme. Ainsi cet agent anes-

thésique serait plus sûr et d'une valeur plus grande. Il fut le premier à suggérer un mélange d'extrait de glande surrénale avec la solution anesthésique. Tous les chimistes du temps reconnaissaient les effets toxiques de la cocaïne sur le cœur et sur le système nerveux central. D'autres substances, comme l'eucaine, holocaïne, tropacaine, et la stovaïne furent proposées, mais toutes étaient moins efficaces que la cocaïne, au point de vue anesthésique.

Dans la recherche d'un substitut pour la cocaïne, Braun énuméra les qualités suivantes pour une solution anesthésique idéale: 1) cette substance doit avoir un pouvoir anesthésique égal à celui de la cocaïne; 2) elle doit être moins toxique que la cocaïne; 3) elle doit occasionner le moins d'irritation possible dans les tissus; 4) elle doit être soluble dans l'eau, raisonnablement stable et être stérilisée par les moyens ordinaires; 5) elle doit se mêler facilement à des agents vaso-constricteurs, comme l'épinéphrine. L'hydrochlorate de procaine semble répondre à ces exigences. . . L'anesthésie conductive a rendu possible des interventions dans la bouche et dans les maxillaires, qui, autrement, auraient dû être faites sous anesthésie générale. Le fait que ces opérations peuvent être faites sous anesthésie locale influença plusieurs bons opérateurs à choisir la chirurgie buccale, comme spécialité.

—Chalmers J. Lyons, J.A.D.A., 1935, reproduit dans le *Journal of Oral Surgery*, avril 1945.

CLIMAT FAVORABLE AUX RECHERCHES

Dans le domaine des recherches, le facteur le plus important est l'homme—le penseur, qui possède la maîtrise de son champ scientifique, la vision, la patience et l'ingéniosité. Néanmoins, le chercheur le plus compétent ne peut rien accomplir, s'il manque de temps; la recherche elle-même exige du temps et elle doit être précédée et accompagnée de réflexion. Cette concentration de la pensée ne peut se faire sur une cédule tracée à l'avance; elle s'accomplit généralement dans des périodes de détente et elle est le produit de rêves d'hommes doués d'imagination, habiles et compétents.

—Rapport du Comité de Consultation sur l'Organisation des Recherches, Université du Minnesota.
Journal of Oral Surgery, octobre 1946.

BOMBE ATOMIQUE ET STOMATOLOGIE

Du temps de Charlemagne, de Duguesclin, la guerre pouvait être considérée comme un sport, mais actuellement, avec l'aviation et le terrible pouvoir destructeur des engins de guerre de toute sorte, la guerre est devenue un crime odieux, n'ayant de nom dans aucune langue.

Il m'arrive parfois de lancer cette boutade: "La bêtise humaine est si grande qu'elle peut nous donner la notion de l'infini! . . ." La bêtise humaine nous donne, en effet, souvent l'impression d'être incommensurable, et c'est pour cela que, malgré les épouvantables résultats enregistrés au Japon, l'homme est capable d'utiliser encore la bombe atomique.

Demain, nous pouvons donc être victimes de cet engin diabolique et inhumain. Une partie de la nation attaquée sera détruite instantanément, une partie survivra peu de temps aux mortels effets de la bombe, puis, enfin, quelques spectateurs éloignés de l'horrible cataclysme survivront.

Dans quelles mesures ces derniers seront-ils touché par les effets de la bombe atomique?

Un premier rapport scientifique vient d'être publié par le Dr Times, du corps Médical Naval Américain, sur les conséquences médicales du bombardement atomique de Nagasaki.

Chez les survivants, on a pu noter une leucopénie accentuée, des pelades, une gingivite expulsive, les dents étant décellées, friables; d'autre part, les couronnes d'or ou d'autres métaux sont devenues radio-actives.

Devant ces constatations, nous voilà bien perplexes!

Devons-nous, dès aujourd'hui, déconseiller les obturations, couronnes et bridges métalliques???. . .

"La radio-activité des bridges et couronnes métalliques", voilà une question nouvelle à ajouter au programme des Ecoles Dentaires.

—DR M. ROCHETTE, "*L'information Dentaire*, 9 juin 1946.

LA PRISE RADIOGRAPHIES CHEZ LES ÉDENTÉS COMPLETES EST-ELLE NECESSAIRE?

C'est la question que s'est posée Earle D. SMITH qui nous apporte le résultat des investigations entreprises en vue de la résoudre sur des bases précises (*Journ. of Amer. Dent. Assoc.* No. 9/1946). Sur un nombre de mille édentés complets, qui furent examinés radiographiquement au College of Dentistry de l'Université de Iowa, 224, soit 22.4%, furent l'objet de découvertes intéressantes, dont voici le détail: 15.7% de racines et apex; 3.8% de dents incluses; 2.1% corps étrangers et 1.8% kystes.

—*L'Information Dentaire*, 8 sept. 1946.





By courtesy of Papyrus

BOUNTIFUL HARVEST

●The prairies have been blessed once again with bountiful harvests. The young lady whose picture appears above manifests a great satisfaction which should pervade the hearts of all of us as we contemplate how greatly the prairie grain crops will relieve the hunger in Europe.

"It is good to check up once in awhile and make sure you have not lost the things that money cannot buy".

—George Horace Lorimer.



EDWARD T. BOURKE, D.D.S.
Montreal, Quebec.

Associate Editor for Quebec of the Journal of the Canadian
Dental Association.

Graduate, McGill University, 1923.

President, Montreal Dental Club, 1935.

Former Member, Board of Governors, College of Dental Surgeons
of the Province of Quebec.

Former Member of Board of Delegates, Canadian Dental Association.

Member of Committees on Rehabilitation and Health Insurance
of the Canadian Dental Association.

Served in the Canadian Dental Corps, Sept. 1939 to June 1945.

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NO. 11

RESEARCH ON DENTAL CARIES AND ITS APPLICATION TO PRACTICE*

by J. STANLEY BAGNALL, D.D.S., Halifax, Nova Scotia

THE general practitioner who attempts to keep abreast of the literature appearing month by month on dental caries and tries to decide on the relative merits of widely publicized claims for the control of dental caries must feel very much in sympathy with the oft quoted writer in Ecclesiastes when he said: "Of making many books there is no end; and much study is a weariness of the Flesh".

There is a steadily increasing number of articles on some aspect or other of dental caries and from time to time extravagant claims are made for some new method of treatment. Each of these receives its share of publicity from the daily newspapers and the popular magazines. The public looks to us for accurate information on these claims. This poses us with a difficult problem which repeats itself each time the spotlight of publicity is turned on some fresh statement. We appreciate this interest and should try each time to fairly assess the claims. There is danger in taking an extreme stand either way, i.e. the man who lightly dismisses each as "newspaper talk," etc., or the other extreme of over enthusiasm for each new and untried method. Each idea has some merit, directly and indirectly; while on the other hand, too great belief in the treatment may end in disappointment

and a reluctance to believe that succeeding ideas have value.

Fluorine treatment has been much to the fore in recent years and to a lesser extent, as yet, other more recent suggestions. We can better appreciate the value of these if we rather briefly review some of the suggestions which have been made in the past and also the changing conception of the carious lesion.

The publication of Miller's book on "The Microorganisms of the Human Mouth", in 1890, is a logical starting point for a survey of the research on dental caries. This book has long been out of print and copies are so scarce that it is understandable that a number of misconceptions have crept into the literature as to what he did and said. There has been quite undue emphasis on decalcification as the important feature in caries. Much of the work on saliva, tooth structures and enamel solubility has been done under the stimulus of this idea. There have been a number of workers who stressed the importance of other factors, but it is only quite recently that there has been a more general realization that the lesion of caries is complex and much more than simple decalcification.

ANIMAL EXPERIMENTATION

Research on the causes and progress

*Presented at the National Convention of Canadian Dentists, Toronto, May 28, 1946.

of caries presents some very difficult problems. The customary approach, used in so many studies on human disease, of experimental work on animals has definite limitations. No experimental animal is entirely satisfactory for our purpose. While a number have been used, most of the recent work has been on the dog and rat. Both have dentitions quite dissimilar to man, but since they can live on much the same diet they have been useful in some experiments. The dog is highly resistant to caries, while the rat is relatively susceptible. It is still an open question whether caries as it occurs in the rat is similar to that of man. The enamel covering on the rat tooth has a different distribution and is more liable to fracture. The initial step in rat caries seems generally to be fracture of a portion of the enamel which is a different process from that in man. This emphasizes a point frequently overlooked of the necessity of taking every factor into consideration, as two workers using identical diets but of different consistency could get entirely different results and come to quite opposite conclusions. Lessons learned from work on animals cannot be applied directly to man and the final test must be the application to man of the lessons learned from animal experimentation. This can be very difficult since there are distinct limitations to the extent to which children and adults can be used for experimentation. Caries is a comparatively slow process and there may be considerable tissue change before the lesion can be identified clinically. With animals it is possible to section the teeth of the experimental animal and examine them under the microscope. This extreme difficulty of identifying the earliest stages of caries injects an element of doubt into all reports of experiments carried out on humans since it is not possible to be certain that patients reported "caries-free" at the start, or conclusion, of a test are actually caries-free in the strict sense.

A further difficulty with humans is to secure adequate control groups, people who are in all respects similar to the test group, except for the one factor which is being tested. There is always a certain amount of variation between two groups and the reported results must follow accepted biometrical principles to see whether the result is at least several times as great as might happen merely by chance. Too many papers are published where one gets the impression that the worker started out to prove a theory and emphasizes results which favour the theory, neglecting or glossing over results which seem to run counter to it.

ORAL HYGIENE MOVEMENT

Great claims were made for the oral hygiene movement, based on the idea that if all food debris was removed from the mouth there would be nothing from which acid could be formed and therefore teeth would not decalcify. This has led to important indirect results in the better appearance of the teeth and increased consciousness on the part of the public of the value of their teeth. When we attempt to assess the value of oral hygiene in terms of teeth saved it is not possible to give any figures. If the benefits of oral hygiene had lived up to the claims made for it in the past there should by this time have been a noticeable decrease in caries.

VITAMIN D AND MINERALS

An idea of which much was expected was the theory advanced by May Mellanby¹ that poor tooth structure and caries were closely related. Her work touched off a whole series of investigations on vitamin D and the calcium and phosphorous constituents of the diet. The growing child requires vitamin D as well as other vitamins, mineral salts, etc., but the dosing with cod liver oil and other substances was and is carried to extremes. The expected results, so far as building teeth which would show greater

resistance to caries is concerned, are certainly problematical. The indirect results of directing attention to the need for adequate diets have been good. Concern has been expressed that this extreme dosing with vitamin D preparations and mineral salts might cause harmful accumulations in the tissues, but there does not seem to be any proof of this and nature removes the unwanted excess by the usual processes of excretion. There is also no acceptable evidence that the mother is robbed of calcium to provide for the foetus. Actually, calcium demands are not large until the last 6-8 weeks of pregnancy and even then demands of both mother and child can be met by about a pint of milk, or equivalent amounts of Ca from other sources.

Calcification of the second set starts at birth and, with the exception of the third molar, is completed by 8 years. In spite of this many workers have attempted to decrease the incidence of caries by feeding vitamin D to children over 8 years old. It is hard to find a logical reason for this since the enamel of all teeth, except the third molar, is completed by then, the structural cells are dead and there is no machinery by which the enamel can utilize any constituent of the diet. If there is an actual improvement in the caries picture obtained by feeding children over eight years old with cod liver oil, as some careful workers have shown, this is not the result of any improvement in the enamel structure, but may be due to some other reason such as to lubrication of the particles of food and surfaces of the teeth by the oil.

It is of course possible that tooth structures and caries are related in some way, but there is no satisfactory proof that the quality of the calcification of the teeth can be improved by overdosing with cod liver oil, or similar products. We occasionally see patients with marked hypoplasia of the enamel of some of the teeth, more particularly of the first permanent

molar, but there is no evidence that this is due to markedly deficient diets. In a number of these cases it has been shown that the children had severe metabolic upsets at the time of calcification of these teeth. Further, these teeth are not as susceptible to caries, as would be expected, if structure were so important a factor in caries. The teeth of many primitive races have shown remarkable freedom from caries, yet many of these people have existed on diets which might be considered far from adequate. When they come into contact with modern diets they show the same susceptibility to decay as those of other peoples. The advocates of the better calcified teeth have never satisfactorily linked their claims with the sites in which caries ordinarily occurs. Why are the proximal surfaces of contacting posterior teeth so much more prone to caries than the lingual surfaces of the same teeth, if enamel structure is so important? Surely all the poor enamel is not concentrated on the mesial and distal and all the best on the lingual. Therefore there must be some factor which is more important than structure.

SALIVA

Since the teeth and saliva are so closely associated in the mouth it is natural that the saliva should have received a large measure of attention. While the investigations have been many and varied, perhaps the chief interest has been centred on the acidity or alkalinity of the saliva and its ability to remove or neutralize the acids of decalcification. This might be summed up by saying that we have learned quite a bit about the saliva but we cannot do much more about changing it than we can do about the weather. Some day we may be able to give saliva its place in the caries picture.

MICROORGANISMS

The microorganisms of the mouth have received considerable attention,

with the emphasis on those which can produce acid in quantity. One piece of work which received considerable attention was that of McIntosh, James and Lazarus-Barlow¹⁸ on the organisms which they called *B. acidophilus odontolyticus* and which was called *B. acidophilus* and *lactobacillus acidophilus* by others. Since caries was still considered as essentially a decalcification process and since this organism was shown to be a very efficient producer of acid there were many who thought the problem of caries was at last solved. Many of the investigators, impressed with the importance of this organism used special types of media which favoured growth of this organism at the expense of others which might be present and in this way obtained a distorted picture of its prevalence in the mouth. Others, not handicapped by this opinion, used methods which gave a more accurate picture of the percentage relationship of the *B. acidophilus* to the total bacterial population of the mouth. The presence of large numbers of this organism in the mouth means that conditions are suitable for the growth of that particular organism. It still remains to be proved that this organism is actually present at and associated with some phase of the carious process. Mere ability to produce acid does not prove that this organism is essential to development of the lesion. The demonstration of decalcification of a tooth in a test tube by the acid produced by this or some other organism is simply verification of ability to produce acid. Many other factors are present in the mouth which makes it quite different from the simple life of the test tube.

OTHER PHASES OF THE CARIOUS PROCESS

It will be noted that the emphasis in each of these movements of oral hygiene, tooth calcification and acid formation has been on decalcification, or solution of the inorganic portion of the tooth. Is this emphasis on de-

calcification correct, or are there other phases of the carious process which are being neglected? There are certain fundamentals which should be kept to the fore in any research on caries, or in the evaluation of claims made for this or that method to decrease caries incidence: (A) No matter how widespread the attack by caries in any mouth, each lesion in its earliest stages is confined to a relatively small portion of the enamel surface. Years of clinical experience have shown that some areas are relatively susceptible and others relatively immune. An acceptable explanation must provide an explanation for the greater susceptibility of pits and fissures, contacting proximal surfaces and gingival third of buccal surfaces. These are all areas which, for one reason or another, are difficult to keep clean. (B) The carious lesion progresses slowly, even though the rate may vary in different individuals and is probably more rapid in the young than in adults. There is no acceptable method for measuring the growth of a cavity, but we do know that at least in the early stages it is slow. There is good evidence that bacteria are responsible for the process. How are the attacking organisms protected during this stage? The most reasonable explanation seems to be that they are protected by the so-called plaque, yet this structure has received relatively little attention and of the research articles available most have been published in recent years. That this structure forms an efficient covering is shown by the fact that the anaerobic fusiform bacillus is able to grow and multiply on its under side on the surface of the tooth. While forming a protective covering for bacteria it does not prevent the entrance of solutions of such sugars as glucose and sucrose. Stephan² has shown that there is a drop of 2 units in the pH on the under side of the plaque after a one minute rinse of the mouth with 10% solutions of these sugars. This ability of sugar solutions to penetrate this type of structure is

well known. (C) It would appear that decalcification is one of the phases of the complex stages of formation of the carious lesion, but the enamel also contains an organic framework which even though small in volume is important and cannot be overlooked. One of the most significant developments in the study of caries in recent years is the growing attention paid to this organic fraction of enamel. This tissue appears to be a tough protein and is not broken down by the same kind of chemical action as that which causes decalcification of the inorganic parts of the tooth. An acceptable explanation of the carious process must take this organic tissue into account. (D) One of the most obvious features of caries and one which has received perhaps the least amount of research attention is the yellow to brown stain which, according to Gottlieb³, is always present in true caries and if it is not present the lesion is not caries. While this stain is most noticeable in the dentine it also occurs, but to a lesser extent, in the enamel. One of the common occurrences of the stain in this tissue is found in the tiny dark brown pits, generally on the buccal surface, which may remain for years without change, and are probably arrested caries. It is also noted at contact areas between teeth, sometimes only as a persistent stain which can be polished off and at other times associated with a definite softening or roughening of the enamel surface. The stain precedes any change in the surface of the enamel which is detectable by methods of clinical examination. What is the origin of this stain? Why is it more marked in the dentine and why is it always present? Deakins⁴ states that there is no evidence in the literature to support the idea that it is a specific product of pigment-producing bacteria. He believed it to be a melanous-like material produced from the organic matrix of the tooth during the development of the carious lesion.

If these recent ideas of the importance of the stain are correct then new light is added to our knowledge of caries. Thus, test tube experiments where cavities are formed in teeth by the action of acid producing bacteria, but without the formation of the brown stain, are not true caries. It also stresses the importance of destruction of the organic fraction as an integral part of the carious process. It does not, at this time, answer the question whether the initial lesion of caries is an attack on the inorganic or the organic constituents of the enamel.

One of the main technical difficulties met in the study of dental caries has been to devise a method by which the early stages of the attack on the enamel could be studied under the microscope. This has recently been done by Frisbie et al⁵ in a noteworthy piece of work. Their excellent photomicrographs actually show the plaque in position on the surface of the tooth and various stages of the early phases of the attack. Thread-like organisms appear to predominate on the tooth surface of the plaque in the early stages. Frisbie et al consider that the penetration of the outer calcified cuticle of the enamel may be due to the removal of the more readily soluble inorganic constituents of this layer by acidogenic bacteria. This acid action may then account for the opening up of the rods and interrod matrix of the enamel to invasion by spheroidal gram-positive organisms which are shown in the illustrations to have penetrated the tooth well ahead of the disorganized portion. Once the outer cuticle is destroyed by acid-forming organisms they think then that the essential and primary pathological lesion is one of proteolysis, or breaking down, of the organic matrix. This frees the basic tri-calcium phosphate of the enamel rods and favours its decalcification, or solution, by a secondary infection of acidogenic bacteria. Gottlieb³ is even more definite in emphasizing the central importance of the breaking

down of the organic portion. He believes that the attack on the enamel begins with an invasion of the organic pathways through the enamel, particularly by way of the lamellae. These are not the only investigators to stress the importance of the organic portions of enamel, but their work illustrates very well the changing conception of the caries lesion.

It is naturally too early to say whether these views are correct, but if the items already referred to are recalled it will be noted that these provide an explanation which appears to be logical. It would also appear from this that at least two series of enzymes produced by bacterial action may be involved in caries; one associated with the breaking down of the organic portion and the other with acid formation and decalcification or solution of the inorganic portion. These developments have resulted in two methods of prophylactic treatment to prevent the incidence of caries; (A) Interference with the enzyme stage of the process by the use of anti-enzymes and (B) The blocking of the points of entrance of the bacteria into the teeth. These two methods seem at first quite different and it comes as rather a surprise that in spite of the two quite dissimilar methods of approach both have elements in common. Silver salts and fluorine are both anti-enzymes and it is quite possible that both may contribute to the blocking of the entrances.

FLUORINE

Fluorine began to attract considerable attention about 1931 when satisfactory proof was advanced that it was the cause of "mottled enamel". This disfiguring stain had been described in the literature before this and McKay⁶, in 1925, suggested that the community of Oakley, Idaho, obtain their water supply from a different source. It was a bold step on the part of the communities of Oakley, Idaho and Bauxite, Ark., to undertake the expense of a switch in their water

supply at a time when the evidence was not too definite that the cause was in the drinking water. Today, other communities have already, or are at this time, planning to take the reverse step and add fluorine to the water supply where it is not now present to the extent of 1 p.p.m. The reasons back of this changed viewpoint towards fluorine make one of the most interesting stories in public health measures.

When the relationship between fluorine and mottled enamel was first established interest was entirely focused on prevention of the disfiguring stain on the teeth. There was a search for new sources of fluorine-free water or, failing that, the treatment of the water to remove the unwanted fluorine. While this was under investigation, two other phases of fluorine and drinking water were under consideration. Dentists had reported that there was a marked decrease in the incidence of caries in many patients with mottled teeth: while, at the same time, public health authorities were becoming concerned over the possible toxic action of fluorine.

Several communities, including Brantford, have taken the step of raising the fluorine content of their water to 1 p.p.m. This is perhaps an even more courageous step than that taken by those other communities some 15 years ago, even though they are acting on what seems to be more definite data. This idea has received considerable publicity during the past year or two and the question naturally arises whether the plan is one which should be followed by other communities. It will be some years before the question can be answered positively and results in these test communities will be carefully watched. This testing period may run to 10 years, a long time to await result of an experiment. It is to be expected that health authorities in other centres will wonder if it is necessary to wait so long and if valuable time is not being lost by not at once

making similar additions to their communal water. The available data at this time seem to point to the fact that the policy is a good one, but this is not to say that there are not a number of questions still to be cleared up. There have been too many times in the past when enthusiasm carried treatments to unwarranted excesses and it should be our endeavour to put this experiment on a sound basis so that the greatest good will be done to the greatest number and with the least danger of any unfortunate effects.

Our knowledge has hardly advanced to the point where we can speak of a therapeutic dose of fluorine, but if the term may be used, it seems fair to assume that it is about 1 p.p.m. in the drinking water or about 2 mg per day. We know from clinical reports that if the drinking water content rises above 1 p.p.m. one form of toxic effect, expressed by mottling of the teeth, tends to increase rapidly. When dealing with a drug where the dose is of the probable order of 2/1000 of a gram a day, we have something which must be handled with caution. This simply means that in order to obtain the desired effect on caries and at the same time avoid danger of mottling this is the daily dose. This is not to be confused with the larger amounts used in topical applications which are rinsed out of the mouth after use, nor with the lethal action of the drug which Solman¹⁹ places at 0.5 gm per kgm of body weight when taken orally.

There appears to be quite acceptable proof that fluorine in the drinking water has a favourable effect on the incidence of caries. Dean⁷ and others have given us extensive statistics and while there is some variation between observers an estimate of 40% reduction of the incidence and at that concentration there is only slight danger of mottling and then only in slight degree in a small proportion of those using the water.

The method of administering the fluorine by putting it in the drinking water is perhaps not scientific, in that

it is subject to rather wide individual fluctuations, but it has some rather decided advantages. The person taking it receives the dose each day either directly in the drinking water, or indirectly in water added to food, so that there is no danger of forgetting it or trying to make up for the lapses of several days by taking an extra dose. It has also the advantage of being somewhat roughly adjusted to the growth of the child, since fluid intake increases with growth during childhood. It is quite possible that there are seasonal differences in water consumption, with an increase in the hot dry days of summer, which may make some adjustment to the amount added to the water necessary to compensate for this. In rough figures 1 mg of water is taken in 6 tumblers of water and the quantity taken in food averages about the same as that obtained directly in the drinking water.

Fluorine is generally found in water from deep wells, in contrast with surface water. While other information is not always given on the water it seems to be generally true that fluorine occurs naturally in "hard" waters which are well on the alkaline side. "Hard" waters contain an ample supply of calcium which laboratory experiments have shown to have a modifying effect on fluorine. Will the addition of a certain amount of fluorine to a "soft" water have a similar effect to the same amount added to a "hard" water? It is known that the anti-enzyme action of fluorine increases with increasing activity. Drinking water may range from pH 5 to 8, or even beyond that range. Will the action of fluorine where it is added to a communal water which is well on the acid side have the same effect as in the alkaline waters in which it occurs naturally?

There are a number of other sources of fluorine in the diet besides that contained in the drinking water. It is a trace element in many kinds of food, but apparently according to Mc-

Clure⁹ seldom goes over 1 p.p.m. except in some brands of tea and in fish, more particularly canned fish. Another possible source is due to its use as a dusting powder for fruits and vegetables in many localities. These additional possible sources have caused some concern and should be kept in mind, but for some as yet unexplained reason the action of fluorine in food does not seem to be as direct as that in the drinking water.

Several workers and more particularly Machle¹⁰ and McClure and Kinser¹¹ have investigated the excretion of fluorine in the urine. It is found present in traces of about 0.3-0.5 mgs even in areas where no fluorine is present in the drinking water. It has also been noted by McClure and Kinser that with increase in the quantity of fluorine ingested there is a corresponding increase in excretion, showing that there is something like a metabolic equilibrium and very little seems to remain fixed in the body. The bulk of the fluorine is excreted in the urine and while the analytical method used is rather complicated it seems to be the only method suggested so far which might be used to check the amount of fluorine ingested by an individual.

Fluorine appears to have two separate and perhaps distinct actions on the teeth. There is a systemic effect which takes place during the calcification of the teeth when some fluorine ions are fixed into the tooth structure. Volker¹² did not think that this was great enough in slightly fluorosed teeth to affect their acid solubility. There is not at present any definite evidence that the better caries resistance of these teeth is due to their structure. The experiments now under way where fluorine is being added to the drinking water may help clear up a point in connection with the systemic effect of fluorine on the teeth. Weaver²² suggests that the child who moves into a fluoride area a couple of years before the eruption of the permanent teeth

obtains as much protection as the child born in the area. It will be interesting therefore to see if the children of these areas who are 3-5 years old at the time of the addition of the fluorine show as much benefit from the treatment as those born after that time.

The second effect is local and may take place at any time after eruption of the teeth. The method by which the fluorine ions become attached to the surface of the tooth is not known, but Gerould²⁰ has advanced the theory that there is a double decomposition chemical reaction in which some of the calcium phosphate molecules of the enamel are replaced by the more insoluble calcium fluoride. Whatever the form of attachment there seems to be good evidence that the fluorine is attached to the surface for some time.

Considerable work has been carried out in an effort to determine the manner in which fluorine decreases caries. Bibby¹³ showed that the anti-bacterial action of fluorine was so slight that it is not likely a factor. Another theory is that the surface of the enamel is made more resistant because of the formation of calcium fluoride. This seems doubtful as even under the most favourable conditions the amount of this surface change remains small in proportion to the total area. Gottlieb³ has suggested that the formation of calcium fluoride deposits blocks the entrance of bacteria to the organic tracts of the enamel. The theory which has received the most attention is that the fluorine ion acts as an anti-enzyme.

TOPICAL APPLICATION OF FLUORINE

A number of other methods of fluorine treatment besides that of addition to the drinking water have been suggested. The inclusion of fluorine in tooth pastes and mouth washes has been suggested but results obtained have not been encouraging. The most promising method for use in the mouth is the topical application

of a soluble fluorine salt to the surface of the tooth. While techniques vary somewhat in details the general method is that the teeth are carefully cleaned, isolated with cotton rolls, dried, fluorine solution flowed and pumped over all surfaces of the teeth, wait 8-10 minutes, dry with hot air, remove rolls then have patient rinse and spit before swallowing. While there is considerable variation in the reports the method is certainly promising and would seem well worth a period of intensive investigation. Little reference has been made to pH of painting solutions, which might be a factor of importance. It would seem necessary to keep the solution from contact with the saliva during the process, if the reaction is between the fluorine and the tooth, as otherwise the fluorine will unite with the more accessible calcium ions of the saliva. The method of preparing the teeth for the application may be important and a recent article by Bibby¹⁴ indirectly supports this when he states that he obtained the best results on smooth surfaces of the teeth. These are the surfaces which would be most efficiently cleaned by mechanical methods. Reference has already been made to the role of the adherent plaque in caries. Hanke¹⁵ suggested the use of a complex mercury salt for chemical removal of plaques. There are a number of agents which may be used to remove plaques chemically, but because of irritation, or other reasons, they cannot be used routinely as mouth washes. The possibility of using one of these agents to obtain better cleansing of the tooth surface might be tried. There are in addition a number of other variations which might be investigated in the effort to obtain the most efficient method of application.

ANTI-ENZYMES

The realization that the action of fluorine may be due to its anti-enzymatic properties has led to the investigation of other anti-enzymes. Two

which have received some attention are iodicetic acid and synthetic vitamin K. The iodicetic acid is of doubtful value since it is much more toxic to the cell than fluorine and probably no more effective. Its use in the human mouth is not indicated. Synthetic vitamin K holds more promise and further investigation on it would seem to be indicated. It seems likely that its action in the mouth is transient and since it is of low toxicity it might be used to supplement the action of fluorine. This synthetic vitamin K has recently been written up in a popular magazine in glowing terms of its ability to reduce caries incidence. This type of statement is unfortunate and of much too frequent occurrence in the whole field of medical research. It is too often traceable to the over enthusiastic claims made by the investigator. This is unfortunate and it is common experience that no new drug or treatment lives up to the original claims made for it. In this case the write up appears to refer to a report by Burrill et al¹⁶ on their work on synthetic vitamin K. Tests were carried out on two groups of university students during which the test group chewed gum which contained synthetic vitamin K incorporated in the sugar coating, while the control group, who were rather carefully selected, chewed similar gum except that it did not contain any of the vitamin K. They showed an average reduction in new cavities in the test group, as compared with the control of 50% at the end of the first year of the test and of 40% at the end of 18 months. Their method of reporting results as group averages does not give sufficient information. Some conclusions drawn in the paper are open to serious objection, in that the authors compare their results with figures recorded for caries incidence in other groups who were not connected with the test. Such other groups as this are not acceptable controls. They were able in this way to guess at a purely theoretical caries reduction

of up to 89%. Vitamin K merits further investigation, but the work should be carefully done and accurately reported.

OTHER CONTRIBUTIONS TO CARIES RESEARCH

Gottlieb¹⁷ has recently made an interesting contribution to caries research, in which he has emphasized the desirability of blocking the organic paths of the enamel. The ability of silver salts to unite with proteins has been known for a long time and has had considerable application in silver reduction techniques. Its chief disadvantage has been that silver salts turn black on exposure to light. The idea of adding a "wetting" agent to increase the penetration is new and may well prove valuable. Reports on the results of the method in practice will be awaited with interest.

The last few years have shown a number of very interesting developments in research on dental caries. There has been a steady growth of a changed conception of the development of the caries lesion and the appearance of a number of new and promising ideas to decrease the incidence of caries. There has been a switch from a rather general type of investigation on such problems as tooth structure, saliva, oral microorganisms, etc. to a greater concentration on those few square millimeters of the point of attack on the tooth surface. If this localized study enlarges our knowledge of the rationale of the attack it is probable that some of the work of the past can be fitted into the picture. There has been along with this another interesting and significant development in the steady increase in the number of papers which are appearing in the publications of the allied sciences on phases of dental investigations. These articles are rather widely

scattered in publications which are seldom seen by most of our profession so that there is a need for improved facilities in our dental literature to keep us in touch with this work. Not only our profession, but the general public as well, from whom we have to look for a measure of financial support in this work, have been slow to realize that research on dental problems is not only important in its own right, but the mouth offers unexcelled opportunities for investigation and study of growth and development of the hard tissues, in particular, and the mode of action of a number of pathogenic organisms. It is to be hoped that the possibilities of this contribution will be more generally realized in the future and that it will receive the necessary measure of support so that dental research may go on to greater contributions in the future.

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"The man who says, 'It can't be done', is liable to be interrupted by somebody doing it."

ACRYLICS*

by F. J. HOELSCHER, D.M.D., Seattle, Washington.

THE purpose of this paper is to present a better understanding of acrylics and what part they should or should not play in our efforts towards better dentistry. In working and experimenting, one finds a very limited use for acrylic resins in operative dentistry.

I will not bore you with a lot of technical detail, other than to mention that to process resins we put a powder known as polymer particles with a viscous liquid known as a monomer. Generally the processing is one of three techniques: First, the Wet Technique which involves mixing a gingival and incisal dough and applying them in their proper places; Second, the Dry Pack which involves placing powder in the mould both gingivally and incisally and carefully adding the liquid monomer; Third, the Combination Method, which involves combining the Wet and Dry methods. That is, the gingival and body mould is dough trial packed completely. Then the incisal is cut away, and incisal powder is added dry. After this it is carefully wet with the monomer. The combination of these two methods appears to me to be the better.

A new formula known as the Monomer "R" is a more viscous liquid and allows for a better colour arrangement; it also produces greater density. This might be explained through the monomer "R" having a greater affinity with the polymer particles, upon mixing together.

Avoid solvents in acrylic work as they cause checking or crazing. Porosity, checking, crazing, tooth movement, warping and bleaching all come as a result of poor technique not poor materials. To avoid porosity, is to avoid discolouration. One can prevent porosity by being sure that the tempera-

ture of the flask is raised uniformly and slowly. A safe procedure is to start with tap water; use a half hour going up to 158°F; hold one hour; follow by boiling one half hour. Completely bench cool before opening flasks.

The real harm being done by acrylics as I see it is when the resins are selected without using good judgement, and foresight, as to their indication. This is a serious mistake, and more serious is the harm done both the patient and the profession. We well know that dentistry is judged by what we put into it. Before we should permit acrylics in operative dentistry they must prove themselves along with gold, alloy, porcelain and our other tried materials.

STRUCTURAL DENSITY OF ACRYLICS

The structural density of the acrylic resins is below our standard. It is because of this fact that we must never confuse our patients by comparing acrylics with baked porcelain. We well know that baked porcelain retains its crystalline structural hardness and glaze. Acrylics do not tend to retain their minute structural forms nor do they, for that very reason, retain a high degree of polish. Structurally and aesthetically then, baked porcelain will out-perform acrylic materials.

Another point of great importance as a result of structural density and glaze is that baked porcelain will be found to react more favourably to mouth tissue under compression than will acrylic resins under compression. To state it another way, acrylic resins will irritate tissue where baked porcelain will not.

COLOUR SELECTION OF ACRYLICS

We have an adequate selection of colours and shades. Good colour

*Presented before the Annual Meeting of the British Columbia Dental Association, May 11, 1946.

combinations are easily arranged especially in anterior cases where the light is best reflected. In other distal parts of the oral cavity where light is less easily reflected, acrylic resins do not appear as natural for colour as glazed porcelain does. In acrylic cases a dentine colour predominates because it lacks, as is the case with baked porcelain, an enamel body covering which reflects light, rather than absorbs light as do acrylic structures.

INDICATIONS FOR THE USE OF ACRYLICS

Let us consider cavity classifications:

Class 1: In simple pits and fissures, etc., acrylics are not indicated. Preference still goes to gold foil, cast gold and alloys.

Class 2: In distoclusals and mesioclusals in bicuspid and molars, acrylics are not indicated because of functional stresses. Preference goes to gold foils, cast gold and inlays.

Class 3: In the case of proximals in the anterior teeth, acrylics are not indicated. Preference goes to baked porcelain, gold foil, cast gold and synthetics. Aesthetically baked porcelain is indicated over acrylic resins in this shadow area because baked porcelain reflects light best.

Class 4: In mesial, distal and incisal angle restorations, acrylics are indicated and may be used in combination with gold re-inforcement. Acrylic inlays placed incisally without gold or other metal combinations are not indicated.

Class 5: In gingival cavities, preference again goes to gold foil and baked porcelain. However, acrylics are used here most extensively. It is here our eyes should be ever watchful as to future wear.

ACRYLIC JACKET CROWNS

Once again we are confronted with anterior teeth and good light reflection. Baked porcelain is preferred aesthetically because of its crystalline structure and glaze. Acrylic jackets,

if they are to be constructed should possess metal reinforcement, good normal bulk, vertical height and proper incisal function. They are doubtful as to permanent tendencies because of tissue irritation in some cases, and are likely to loosen under normal strain, in others. Bulk must be considered to offset the lack of crystalline structures if we hope to maintain their forms along with metal reinforcement.

ACRYLIC BRIDGEWORK

When commercial laboratories, literature etc., tell us about the "all acrylic bridges"—look out! We had to do the same for the "all porcelain bridges". These acrylic bridges, made in combination with or without metal are seen too often to my way of thinking. The indication still goes to gold pontics and baked porcelain combinations in bridgework. It's the longer way and a better way. The acrylic pontic root will irritate tissue more than a baked porcelain root when the correct and same pressure is applied against the gums, as should be in a correct self cleansing joint, at this gingival point bearing. A warning bell rings in my experience for acrylic bridges, even when used aesthetically with solid gold or other metal reinforcements.

PARTIALS AND DENTURES

The new Justi dents pearl all acrylic denture tooth advertised is for sale at all supply houses. We know tissue bearing cases tend to promote absorption, soreness, low pressure areas, etc. Perhaps an acrylic partial or denture with all acrylic teeth could be worn more comfortably than a denture base with all porcelain teeth, but the ordinary wear and tear makes such a situation doubtful. Much experimentation will be done with acrylic resins by both the dentist and commercial firms regarding partial cases and denture cases before we learn very much of its practical soundness.

Acrylics come in handy as a repair

kit. Examples would be around metal tubes, precision attachments where aesthetics is required, in irregular short bite pontics where odd shapes must be aesthetically done. Short lower cuspid veneers where great upper stresses are applied, in the incisal of cuspids where we sometimes find enamel imperfections and initial decay. We see them in younger patients who have suffered from fever or malnutrition. These can be corrected in combination with gold and acrylic. Cut out the incisal enamel surface deficiencies and restore lingual in gold and labial portion in acrylic according to colour and tooth form; the advantage being that small areas can be built in with acrylic and fit more accurately than can a small area be fitted with baked porcelain, thereby conserving tooth structures and aesthetics. It may be used as temporary jackets during a long reconstruction program in place of copper bands, ill shaped celluloid and aluminum crown forms, gutta percha, low fusing metals, etc., which we now use. The patient will greatly appreciate this temporary measure while you are spending the time reconstructing the mouth with more permanent restorations.

SUMMARY

Work with acrylic is new, try to understand it and use it where it will do something for you when one of our tried materials won't suffice. Acrylics are a long way from replacing anything like what Dr. G. V. Black laid down for us — as gold foil, gold inlays, baked porcelain, alloys, etc. Baked porcelain far outshines acrylics both for body and glaze, so necessary for long life and lasting aesthetics. However, if you do not bake porcelain and gold foil will not be tolerated aesthetically, your judgement warrants the use of acrylics for aesthetics as in Class 5 cases. There are no short cuts to good dentistry and so with the processing of acrylics, a careful and exacting slow heat procedure again

spells the difference between success and failure. Be sure never to confuse our patients by stating that acrylics have come to replace porcelain because that, I believe, will never happen.

The long trail and simple truths are what give us what strength and power we possess, and the profession we love, its value to the people we serve. With due respect to our beloved Black, Taggart and many others who placed gold, alloy and porcelain so many years ago, I believe that their restorations fundamentally have changed but little. It is our trust and responsibility to preserve those fundamentals. We are the judges as to what will make for better dentistry, whether it be acrylic or another. For this reason we are put on guard to act with every rational endeavour possible to set our standards high. These standards cannot be kept up if we accept too readily every material and program offered.

An example is the Amalgam Acrylic Bridge. In this bridge amalgam is placed on the gingival cavity surface of the abutment teeth, then on top of this is placed processed acrylic and wires which in turn is set, and then fresh amalgam is forced down upon this acrylic surface. "This work is seven months old" the dentist writes and he feels sure it will outlast and not come adrift like gold bridges do. Here, dear doctor, again let us repeat, "What price dentistry if we are to accept such drivel". Another example is the immediate acrylic resin restoration made "while your patient waits". Glass wool and nylon fabric is used in this technique. It supposedly does everything, but the next thing will be for someone to discover a plastic chewing gum guaranteed not to stick to your acrylic bridge work, now that the click is taken out of grandmother's teeth.

I would like to give a word to the commercials. The radio tells us to use Lydia Pinkham's pills for pale people so we buy Lydia Pinkham's pills.

There need not even be a doctor within sight or hearing, so strong is the medium of advertising and quacking over the radio. Papers, letters, and dental literature, laboratories and laboratory technicians try to do our thinking for us because we sometimes make the mistake of listening without thinking first and we buy their products, e.g., acrylic bridges, all porcelain bridges, partial castings of all descriptions. We forget for the moment that we should be the teachers and judges, and not the commercials and laboratory technicians. We should have the intelligence in selecting and insisting upon what type of restoration should be used in the mouth thereby preserving to a greater degree the respect due us. I will admit that much is scientifically done for us, which we

as dentists appreciate very much but we must also realize the first intention of the commercial is a natural one and that is to sell us something, regardless. It is our first consideration then to be particular and careful in our selections. We represent an army fighting for our patients' health and morale. Their well-being means your happiness and mine. I am therefore humbly grateful for all that dentistry has entrusted to my care. In closing let us then put up a good fight for what we know to be true and right so that in the eyes of all we serve we shall gain and maintain the respect our great profession deserves, through observing what should be our first obligation, the conservation of tooth structure and the promotion of oral health.

ANNOUNCEMENT

Canadian Dental Association Convention, June 24-27

Arrangements are rapidly taking shape for the 1947 meeting of the C.D.A. at Digby, Nova Scotia. Convention headquarters are located in the spacious Pines Hotel, a luxury tourist resort, provided with one of the best golf courses in Eastern Canada. The "Pines" is being taken over completely for the convention.

Digby is situated on historic soil. Here, on the shores of Annapolis Basin, was founded the first permanent settlement in North America. The museum at Fort Anne and historic sites in the vicinity are full of interest to those interested in early Canadian history.

The joint Convention Committee, under the chairmanship of Hugh M. Eaton, has already had several meetings, the most recent of which was attended by the President and Secretary of the C.D.A., Vic Crowe, and Don Gullett, whose helpful suggestions were greatly appreciated.

It is emphasized that those planning to attend the convention should notify the committee immediately, if possible, so that their accommodations may be arranged and they may be supplied with travel information, etc. Notify either Dr. H. S. Crosby, Birks Bldg., Halifax, or Dr. Don Gullett, Secretary of the C.D.A. Smooth running arrangements can be best effected by early planning.

Remember the dates, June 24, 25, 26, 27, timed to just anticipate the tourist rush from below the border, when climatic conditions are at their best for a seaside holiday.

G. M. LOGAN,
Chairman (Publicity).

ANNOUNCEMENTS

Course in Periodontology

The third of a series of one-week post-graduate courses in Periodontology is to be given in the Faculty of Dentistry, University of Toronto, December 9 to 14, 1946.

The course will consist of lectures and demonstration-clinics. Diagnosis and treatment planning will be given special consideration. In addition to an exposition of the more recently approved methods of treatment, attention will be given to the relation of local and general metabolic factors involved in the control of periodontal diseases as well as the related therapeutics.

In order that the maximum benefit may accrue to those taking this instruction, the enrolment in each group will be limited to ten.

The fee of \$75.00 is payable at time of application.

For further particulars an inquiry should be addressed to the Dean, Faculty of Dentistry, University of Toronto, 230 College St., Toronto.

Post-Graduate and Graduate Courses in Orthodontics

The Faculty of Dental Surgery of the University of Montreal has made arrangements to give a two-weeks post-graduate course in Orthodontics from November 18 to November 30. Orthodontists only are eligible. This course will be given on the twin arch appliance, as advocated by Dr. Johnson. Lectures and clinics will be given in English and French languages. The number of applicants is limited to 6 and the fee for the whole course is \$40.00.

There is also a graduate course in Orthodontics, of one year duration, which started last Sept. The next course will begin on September 15, 1947, and, as the number of candidates is limited to ten, the applications should be sent in as soon as possible for the coming year.

Any information regarding these courses and all applications should be made immediately to Dr. Ernest Charron, Dean, University of Montreal, 2900 Blvd. Mount-Royal, Montreal.

Academy of Dentistry, Toronto

The annual Winter Clinic of this Academy will be held at the Royal York Hotel, November 28. A well chosen program of lectures and clinics has been arranged. All dentists will be welcome.

Minnesota State Convention

The next annual meeting of the Minnesota State Dental Association will be held at the Auditorium in Minneapolis, February 24 to 26, 1947. Members of the Canadian Dental Association will be heartily welcome.

Alpha Omega Fraternity

The 39th Annual Convention of this Fraternity will be held at the Book Cadillac Hotel, Detroit, Michigan, December 28 to 31, 1946, and January 1, 1947.

DR. LOUIS I. GALIN, *National Marshal*,
17599 Greenlawn Ave., Detroit 21, Mich.

The Forum

PRELIMINARY REPORTS ON THE EFFECT ON DENTAL CARIES OF THE USE OF SODIUM FLUORIDE IN A PROPHYLACTIC CLEANING MIXTURE AND IN A MOUTHWASH

by B. G. Bibby, H. A. Zander, Mary McKelleget and Bertha Labunsky.
Tufts College Dental School and Massachusetts Department of Health,
Boston, Mass.

Summary of Report in Jour. of D. Research, Aug. 1946

A study in which 3 dental prophylaxes using a 1% sodium fluoride-pumice-hydrogen peroxide mixture were given to the teeth on one side of the mouth of 47 children showed an overall reduction in new caries of approximately 43%. A similar study in which 2 fluoride prophylaxes were given to 95 children reduced caries by approximately 25%. (This mixture was prepared by adding one third volume of a 4% solution of sodium fluoride to commercial hydrogen peroxide and adding enough of this fluid

to the pumice to make a fluid paste.) It is not believed that the difference in the results is fundamentally the result of the number of treatments given. In both instances caries reduction in the upper teeth was much greater than in the lower teeth. The use, thrice weekly, of an acid (pH 4) mouthwash containing 0.1% sodium fluoride for 1 year did not reduce caries activity in 31 dental students below that of 15 using a control fluoride-free mouthwash, or 39 using no mouthwash.

THE FUTURE OF DENTISTRY AS A HEALTH SERVICE

by HAROLD HILLENBRAND, D.D.S.

Editor, Journal of the American Dental Association

Condensed from Jour. Michigan S. Dental Soc. July, 1946.

If you took all of the American children, between the ages of six and eighteen, to a dentist and gave them the fillings they need now, you would have to insert a total of 244 million fillings.

If you took all American adults and gave them the fillings they need, you would have to insert 285 million dental fillings. The total backlog of accumulated defects, therefore is somewhere around one-half billion fillings in this country in accumulated need.

Dentists would have to extract 25 million teeth for American adults. And in order to replace those teeth, each year dentists in this country

would have to insert 11 million prosthetic appliances of one type or another.

To this total of fillings, extractions and prosthetic appliances must be added an unknown number of roentgenographic examinations, diagnoses, prophylaxes, treatments of periodontal diseases, orthodontic, surgery and root canal treatments, and all of those other things that go to make up a sound dental practice.

When we recognize the problem of dental need, then we can no longer go about saying there is no problem; and we can no longer go about saying there is no need for dental plan-

ning.

There is also the problem of dental cost. If we took the average American adult to a clinic and gave him what the economists like to call "initial care", it would cost between \$55 and \$60 for each individual. To take care of him after he has had his initial care would require, according to one estimate, about \$30 a year.

Melvin Dollar of the Michigan State University, estimates that to provide initial care for the American people would require an expenditure of five billion dollars. You will remember one billion dollars is about twice the amount of money all of the American people spent for all types of dental care around 1940.

There are about 75,000 dentists in this country of 140 million people. However, it may interest you to know that forty-five percent of all dentists in this country are fifty-five years of age or over, half of the dentists are forty-five years of age or over. What does this mean? It means that dentistry is an aging profession in the face of an increasing demand for service.

Horner has estimated that in 1945 the national average of dentists to patients was one to 1,740. Horner further estimates that by 1950 there will be one dentist for every 1,938 people in this country. In 1943 there were only 243 hygienists in the entire country. Unless that personnel picture is improved little aid can be expected from this quarter.

In 1920 the volume of business of

the commercial dental laboratory was fifteen million dollars. Last year, it is estimated, that they had an income of one hundred and forty-five million dollars.

Pending before the Senate Committee on Education and Labour, are two bills, which I think will have an important impact on the dental problem. The first bill is S. 190 which proposes two million dollars to build a National Institute for Dental Research, as a part of the National Health Institute at Washington.

The second bill, S. 1099, is equally important because it pioneers for dentistry one of the most important experiments in public health. S. 1099 provides an unnamed sum, sufficient to meet the purpose of the act, for grants-in-aid to the states for purposes of dental health education and dental care.

It seems to me the first and most important point is to pass the legislation that is now pending before Congress in the form of S. 190 and S. 1099.

Already a dental health program in this country has been too long delayed. For eleven years there have been strong movements to sell one kind, and only one kind of a solution. The dental profession, aided by enlightened citizens, is strong enough to develop a program if there is concerted and uniform action. When we have that, dentistry will be heard in the halls of legislatures to produce an effective dental program that will eventually bring better health to more of the American people.

DENTAL SERVICE

by RICHARD D. STRIEBY, A.B., D.D.S., Kansas City.

Condensed from Jour. of Missouri S. Dental Assoc.

Few people expect any of their teeth ever to decay, although 90 per cent do experience it. No one expects to develop periodontitis, although millions of people are wearing artificial dentures because of it. Few of the people make any plans to pay for professional

dental service, since they do not anticipate needing this service. Rarely does the family budget include provisions for professional dental care.

When the individual learns of the need for dental restorations or treatments, he is faced with the choice of

paying for them with funds he intended to use for other things which he wants, or neglecting his dental health. With the people of ordinary means there is usually this choice between spending their money for something they actively desire, or for professional dental service to which they only passively submit.

During the past few years this choice has not been so difficult, because of higher incomes, and, because of the lack of objects which ordinarily attract much of the family income. But this choice is going to become difficult again when the many new, and improved postwar products reach the market. As the desire for these new products is created in the minds of the people with persistent advertising and selling, the choice in favour of dental service will become less frequent.

It would be short sighted for the dental profession to be lulled into inactivity by the present increased demand for dental service, and not prepare for the future. It is misleading to simply count the number of teeth in

the nation which need to be filled or extracted.

It is the responsibility of the dental profession to care for the dental health of the people. This responsibility extends to the creating of the desire for dental service. To the desire for dental service must be added the desire to pay for it in preference to most of the trappings of life. Dental service should not constitute a sacrifice of something more strongly desired. Our educational programs should not only educate people to desire dental health, but also to anticipate the cost of dental service. If this responsibility is accepted, and these objectives carried out, the dental profession in its present form should continue to be an indispensable part of society.

If the dental profession does not accept this responsibility, and does not succeed in maintaining the dental health of the people, it is only logical to assume that there will be more and more agitation for Federal dental service, until finally the Federal Government accepts this responsibility, and provides the dental service.

CLINICAL EFFICACY OF POWDER AND PASTE DENTIFRICES

H. B. McCAULEY, M. J. SHEEHY, D. B. SCOTT, P. H. KEYES, S. J. FANALE and PETER P. DALE, Rochester, N.Y.

Summary of paper in Jour. A.D.A., Aug. 1946.

A powder and a paste dentifrice were subjected to clinical tests for efficacy in forty-seven adults. These tests were founded on the accumulation of a pigmented pellicle during twelve days of twice-daily two-minute toothbrushing, and the removal of twenty-four-hour-deposits of mucinous film and materia alba by a single two-minute brushing. Two per cent of persons using the powder and 8 per cent using the paste developed pigmented pellicles in the twelve-day

test. Using the control dentifrice of tap water, 41 per cent produced similar deposits. Complete removal of twenty-four-hour accretions by two-minute brushings occurred in 74 per cent of subjects using the powder; in 79 per cent using the paste, and in 44 per cent using the water. Use of an insufficiently abrasive dentifrice favours the production of a pigmented pellicle. — School of Medicine and Dentistry, University of Rochester.

A dental physician in every home would not prevent dental disease, but the combined force of all the dental physicians in this country, set against candy alone, would be a wonderful help. No baby was ever born crying for candy.—James Robinson.

PENICILLIN

by ALEXANDER B. MacGREGOR, M.A., M.D., M.R.C.S., L.D.S.

Excerpt from Br. D. Jour. July 19, 1946.

In acute ulcerative gingivo-stomatitis there is no doubt that in the majority of patients, pastilles present the most rapid and convenient method of obtaining a subsidence in the acute condition. As we have pointed out on frequent other occasions, adequate treatment to remove gum-pockets and deal with areas, viz., gum-flaps over lower third molars, etc., from which reinfection may occur, must be undertaken, subsequent to the penicillin treatment, to prevent recurrence. The response to penicillin is frequently dramatic in the acute stages: but, as has already been made clear, penicillin acts only for as long as it is there, and while the mouth may be free of fusiforms, spirochetes and other penicillin-sensitive organisms while penicillin is present, after cessation of treatment a pocket

may become reinfected since the organisms appear always to be present to some degree even in the normal mouth. In non-acute types of gingivitis penicillin will, of course, eliminate penicillin-sensitive organisms from the gum-pockets and a transitory improvement is frequently noted. The pockets, however, still remain, though much good may at times be done with penicillin in getting broken-down and ragged epithelium to heal by removing the local infection even temporarily. Normal measures of scaling, cauterising, gingivectomy, and so on, must be undertaken to deal with the pockets, since the patient cannot spend the rest of his life sucking penicillin in order to ensure that the pockets are free of sensitive organisms.

INTRAVENOUS ANAESTHESIA—ITS ABUSE*Editorial, Bulletin of the Los Angeles County Medical Association*

The comparative ease and convenience of administering intravenous anaesthetics has led to increasingly great use of these agents in medical and dental offices where they are frequently given by persons with little or no training in medicine in general or in anaesthesia in particular. The fact that the barbiturates which are used for this purpose possess a fairly high margin of safety may blind users to the ever present dangers inherent in any drug which produces unconsciousness. An unwarranted sense of security may end in sudden tragedy. A number of deaths have resulted from the administration of these anaesthetics by unqualified lay assistants in offices which were not equipped with proper apparatus for resuscitation and where, either because they were not on hand, or for lack of medical knowledge, stimulant drugs were not used or were used improperly.

When administered by skilled physician-anaesthetists in proper surroundings to patients who present no contraindications, sodium pentothal and suitable related compounds are reasonably safe and highly useful anaesthetics. There is, however, always the possibility that respiratory or circulatory collapse may suddenly occur without warning no matter how carefully the drug is given. When it does, it taxes all the skill and judgment of a highly trained anaesthetist. He must decide whether to use artificial respiration and if so in what manner. Metrazol, picrotoxin, coramine, and epinephrine are among the drugs which might be indicated. Laryngeal spasm may make intubation necessary.

The physician or dentist who permits lay office assistants to administer intravenous anaesthetics is asking for trouble and if he gets it in heroic doses he has only himself to blame. No

such anaesthetic should ever be given except by an experienced physician, who in turn should have an assistant who is free to insert airways, prepare medication when indicated and hold the jaw in position to permit free breathing. All drugs needed for emergency use should be on hand as well as facilities for intubation and, if possible, for artificial respiration.

In some dental offices, these anaesthetic agents are administered to patients for cavity preparation, simple extractions and even for prolonged and difficult extractions of impacted molars. There is frequently no preliminary medical examination of the patient. Nothing is known about his blood pressure nor of his cardiovascular and respiratory systems. Neither urinalysis nor blood count is done and patients are permitted to leave the office, often to drive their own cars, before regaining full coordination and mental clarity. At times these anaesthetics are dangerously prolonged when surgical difficulty is encountered. Meanwhile shock increases and the quantity of infected blood, mucus and saliva

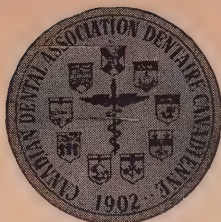
which is swallowed and perhaps aspirated increases. Nitrous oxide is safer for brief dental anaesthetics. It is comparatively safe for healthy patients because cyanosis gives warning of approaching asphyxia. Since the respiratory centre is not paralyzed as it is by overdosage of barbiturates, cessation of administration of nitrous oxide is usually quickly followed by deep respiration stimulated by the accumulated carbon dioxide in the blood.

There seems to be forgetfulness of the long-established fact that local anaesthesia is preferable, and in skilled hands, usually practicable for operations within the adult nose, mouth and throat. The incidence of postoperative pulmonary complications is materially less than when general anaesthesia is employed. The hazards of administering general anaesthetics in offices where equipment is inadequate and assistants too few and poorly qualified are so obvious and so well understood even by the public that it is most difficult to explain or justify an unfortunate result in court.

MY CODE OF ETHICS SHALL BE

From The Dental Assistant, Jan.-Feb. 1946

1. To exalt my work and consider it an opportunity to serve the profession of dentistry and people in need of dental care.
2. To increase my knowledge of dentistry as it relates to health and dental service.
3. To remember that my success is the success of the office in which I work; therefore, I shall be loyal to my employer and concerned for the welfare of his office and the patients.
4. To develop a sense of protection for the health and well-being of patients by complete and careful sterilization and sanitary precautions.
5. To comply with prevailing dental laws.
6. To increase my effectiveness by constant self-improvement.
7. To add to my effectiveness by following the important rules of personal hygiene and developing a sympathetic and pleasing personality.
8. To deport myself with a dignity in keeping with professional standards.
9. To refrain from critical discussions of other assistants, of dentists and their practices, of patients, or of the business and professional affairs of my own or any other dental office.
10. To speak with pride of my employer when out among my friends.



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Editorial

EQUITABLE FEES

The Prince of Westminster College in Cambridge wrote the following in his book concerning the ministry: "Our business is not with those who are born preachers. Should you be thus endowed, you need not confer with flesh and blood; though, considering the danger of approbation, possibly of adulation, to which this may expose you, a short time in Arabia might well be spent. We do not profess to produce the man who mounts up with wings as eagles. On the contrary, we have to take care not to clip his pinions. All we can hope to do much for is the man who can walk for a long day and not faint".

This article is not for the man who knows the last word in practice management but it is for the average dentist who can "walk for a long day and not faint", who is eager to improve his methods of practice. In this article but one aspect of this problem is discussed.

We are told that in the U.S.A. between 1939 and 1946, the wages of the average industrial worker rose from \$1241 to \$2386, almost double, and this includes both skilled and unskilled workers. The increase in Canada is not so great, still there has been a marked increase and this for the same amount of work.

The average dentist has a larger income now than in 1939 but in most cases this is due to working longer hours and more strenuously. The fees remain about the same and this should not be. Why have not dental fees increased with the general increase in the cost of living?

How many dollars one can earn is of only relative importance. The

important thing is what can be secured in the way of comfort, satisfaction and security with those dollars. The inflation spiral is well under way. A few years ago thousands of Canadians could contemplate retirement on life savings of say \$20,000, which, invested at 6%, would equal \$100 a month. To obtain the same income now would require \$40,000. On top of this high income taxes and increased cost of living, increased spending on social legislation largely to benefit someone else, have changed the whole picture for dentists. Assistant's salaries have been increased or should be. The cost of supplies has increased. General price increases add up to a definite amount in the cost of living in every Canadian home. The Government's cost of living index is now over 25% above the pre-war level, and is likely to go to 30% soon and later to 40%. Admittedly the effectiveness of our price control in Canada has so far prevented any serious inflation. However, as wages are increased and production costs mount, prices must be eventually raised and in very many instances they are much higher even now. The present building costs are about 60% above pre-war levels. Labour costs are up 55%. Increases in the cost of furniture amount to 26%, clothing 23%, food 14%. The rising costs affect everything and everyone, everywhere.

Of course when one considers our condition with the tremendous depreciation of the currencies in China, Greece, Poland, Hungary, Italy and other countries, we, in Canada, have much for which to be thankful. However, this does not mean that dental fees should remain static.

It is not difficult to add 10% or more to the fee for a denture, or bridge, but it is difficult to raise the fee for prophylaxis, an amalgam filling, etc., and yet equity demands such procedure."

One of the fee problems at present also is the D.V.A. schedule to which reference has been made before. If the surgeon obtains \$25 for a tonsillectomy, is there any possible reason why a dentist should receive only \$1 for removing a tooth often more difficult than the removing of tonsils? We are allowed \$7 for a root canal operation plus one radiogram while in Michigan, the D.V.A. fee for such an operation is \$20, also \$8 for an M.O.D. amalgam while our fee is \$4; \$5 for a synthetic filling compares with our \$3; \$4 for prophylaxis, while our fee is \$2; \$4 for examination and execution of forms while our fee is \$0.00. These are conditions which should be rectified and rectified now.

Prominent business executives have pointed out that sharply higher labour costs will be a major factor in increased selling prices, that it is reasonable to expect a permanently higher level for most of our business transactions; that prices of finished goods, wages and national income will all likely remain 40% above pre-war levels. Where does dentistry fit into this picture, certainly not by extracting a tooth, including anaesthetic, for \$1.

It is high time that we sat down and gave some consideration to our financial set-up. If D.V.A. fees are not right pressure should be brought to bear to make them right. If fees for civilians who have never seen service

need correcting, why not do so and do so now? There was never a more opportune time to make reasonable adjustments along these lines. The dentist who does not make such adjustments is unfair to himself, his family, and to his profession.

A full time Public Relations Office of the Canadian Dental Association could help all of us immeasurably in solving some of these problems but until we catch the vision of such a policy and are prepared to support such a program, we shall each have to do our best to solve our own problems.

M. H. G.

BOOK REVIEWS

The Classification and Treatment of Injuries to the Teeth of Children, by Roy Gilmore Ellis, B.D.S. (Adel), D.D.S., Ms.C. (Dent.), Professor of Operative Dentistry and Director of the Dental Clinic, Faculty of Dentistry, University of Toronto. 256 pages. 164 illustrations. 2nd Edition, revised, Published 1946 by Year Book Publishers, 304 South Dearborn St., Chicago. Price \$3.25.

In these days when special emphasis is being placed upon the importance of children's dentistry there is a particular need for just such a book as this. The book deals with the classification and treatment of injuries to the teeth of children and covers almost all the accidents which happen to children's teeth.

Dr. Ellis has written this book for dental student and general practitioner alike and is particularly well equipped to write such a manual.

The apparent increase in the number of fractured or traumatized anterior teeth in the young patient calls for a careful study of these matters and this book is the answer to the problem.

M. H. G.

Dentistry an Agency of Health Service, by Malcolm Wallace Carr, D.D.S., Director of Oral Surgery and Visiting Oral Surgeon, Metropolitan Hospital; Attending Oral Surgeon, St. Luke's Hospital, Knickerbocker Hospital, Polyclinic Hospital, Flower-Fifth Ave. Hospital; Consultant Oral Surgeon, Roosevelt Hospital, New York. Lecturer in Oral Surgery, Graduate School of Medicine, University of Pennsylvania. Studies of the New York Academy of Medicine Committee on Medicine and the Changing Order. Published

by The Commonwealth Fund, 41 East 57th St., New York. Price \$1.50.

This book presents a comprehensive picture of dentistry in the United States, its history, training, present activities and problems, and some indication of future trends. Outstanding dental authorities have contributed to the work showing how during the century of its history dentistry has progressed from a bio-mechanical craft to professional status. They summarize exceptional advancements in dental practice and research. Current problems are discussed, such as the obstacles to dental health insurance, the inadequacy of dental care in certain rural areas, and the need for a larger number of competent dental research workers and increased financial support for their endeavours.

The dentist of tomorrow must have a broader scientific and public health background since the dentist is a part of the great pattern of public health, and dentistry of tomorrow must assume its responsibility as one of the leading health services.

This book should prove valuable to the dentist who desires a total view of the present status of our profession and its place in a broad health service as conditions in Canada are very similar to those in the United States.

M. H. G.

Accepted Dental Remedies, Twelfth Edition, 316 pages, prepared by the Council on Dental Therapeutics of the A.D.A. and published by the American Dental Association, 222 East Superior Street, Chicago 11, Illinois. Price \$1.50.

This valuable book has become so well known in dental circles that one rather takes for granted that it will find its way into

most offices. It contains a list of official drugs which have been accepted by the Council to promote a rational dental materia medica, also a bibliography to published statements of the Council with regard to unaccepted products.

Statements of the Council are based on information in its current files and are subject to revision in the light of additional evidence.

New features in this edition include sections on streptomycin, mucilaginous substances, tooth-brushes, prescription writing and a table of contents.

The portions dealing with the fluorides, penicillin, nutritional factors, slightly soluble anaesthetics, and symptoms and treatment of acute poisoning, have been revised extensively.

M. H. G.

DENTAL CORPS NEWS

SUPPLEMENTARY LIST OF CANADIAN DENTAL CORPS OFFICERS

RETIREMENTS

Rank, Name and Date	Civilian Address
Capt. H. M. MacKenzie, 3-8-46	Charlottetown, P.E.I.
Lt-Col. A. D. MacGregor, 14-8-46	Halifax, N.S.
Capt. S. D. Brigel, 7-8-46	Montreal, Que.
Capt. J. B. Lapointe, 13-8-46	Quebec, Que.
Major G. M. MacDonald, 14-8-46	Montreal, Que.
Capt. A. W. Oliver, 13-8-46	Montreal, Que.
Major L. J. Perron, 26-8-46	Verdun, Que.
Capt. I. W. Shane, 27-8-46	Outremont, Que.
Lieut. D. B. Ward, 14-8-46	Montreal, Que.
Capt. J. M. Bergman, 2-8-46	Toronto, Ont.
Capt. W. F. Bobok, 1-8-46	Toronto, Ont.
Capt. W. A. Branch, 22-8-46	Toronto, Ont.
Capt. B. S. Chadwick, 1-8-46	Toronto, Ont.
Capt. J. A. Faulkner, 22-8-46	Barrie, Ont.
Capt. W. R. Fletcher, 22-8-46	Merlin, Ont.
Capt. H. B. Freeman, 2-8-46	Toronto, Ont.
Lt-Col. J. A. Grant, 17-8-46	Simcoe, Ont.
Major C. L. Griffin, 22-8-46	London, Ont.
Capt. J. E. Hackett, 9-8-46	Toronto, Ont.
Capt. M. Kapusta, 9-8-46	Toronto, Ont.
Capt. J. G. Kaye, 21-8-46	St. Catharines, Ont.
Capt. G. A. MacPherson, 24-8-46	Waterford, Ont.
Capt. J. E. Merritt, 17-8-46	Toronto, Ont.
Capt. J. F. Methven, 7-8-46	Chatham, Ont.
Capt. D. C. McColl, 21-8-46	Toronto, Ont.

Rank, Name and Date	Civilian Address
Capt. J. G. McCartney, 22-8-46	Madoc, Ont.
Capt. C. T. Peterson, 23-8-46	Bruce Mines, Ont.
Capt. H. M. Potashin, 15-11-45	Toronto, Ont.
Capt. J. C. Riffell, 7-8-46	Toronto, Ont.
Capt. J. L. Smith, 20-8-46	Toronto, Ont.
Capt. P. T. Smylaski, 8-8-46	Hamilton, Ont.
Capt. D. W. Stoneman, 20-8-46	Toronto, Ont.
Major L. J. Stuart, 26-8-46	Kingston, Ont.
Capt. E. S. White, 25-8-46	Toronto, Ont.
Capt. J. A. Christie, 12-8-46	Norwood, Man.
Capt. A. E. Diner, 23-8-46	Winnipeg, Man.
Capt. Z. Kasloff, 12-8-46	Winnipeg, Man.
Capt. N. B. Moss, 30-8-46	Winnipeg, Man.
Capt. M. Palansky, 13-8-46	Winnipeg, Man.
Capt. A. L. Rothstein, 26-8-46	Winnipeg, Man.
Capt. A. C. Blue, 24-8-46	Saskatoon, Sask.
Capt. C. W. Olsen, 23-8-46	Saskatoon, Sask.
Capt. R. I. Yorsh, 1-8-46	Wynyard, Sask.
Capt. E. Ellison, 29-8-46	Edmonton, Alta.
Capt. P. H. Hervieux, 15-8-46	Edmonton, Alta.
Capt. W. R. Upton, 15-8-46	Calgary, Alta.
Capt. G. C. Walkey, 29-8-46	Pearce, Alta.
Capt. L. E. Gilroy, 27-8-46	Eburne, B. C.
Capt. R. J. Warshawski, 19-8-46	Vancouver, B. C.

CANADIAN DENTAL ASSOCIATION NEWS

(FROM THE OFFICE OF THE SECRETARY)

Studentships

The Canadian Dental Association is pleased to announce the establishment of "studentships" as outlined in the following regulations:

1. The Canadian Dental Association through its Research Committee offers "Studentships" to suitable students or graduates who have given distinct evidence of capacity for original research, (or, who have won high distinction in scientific study during their University training), and who desire to prepare themselves further for scientific research by continuing their study in the sciences fundamental to their research fields.

2. They are available on equal terms to men and women, and are awarded to the applicants who are deemed best qualified by the evidence submitted.

3. An applicant must be a British subject, resident in Canada.

4. The age of the applicant and marital status will be important considerations when making an award. Previous training will also be taken into account.

5. Application for a Studentship must be made by the candidate to the Research Committee of the Canadian Dental Association and addressed to this Committee, care of the Secretary, Canadian Dental Association.

6. Application forms are available at the Canadian Dental Association Office on request.

7. An applicant shall submit a transcript of his university record together with a statement from his sponsor who may be the Dean of a Dental School or head of a scientific department within a university, showing that in his estimation, the applicant is worthy of training for scientific dental research.

8. The candidate shall state the institution

at which he intends to study and the general line of work to be followed.

9. Applications will be considered at the regular stated meetings of the Research Committee of the Canadian Dental Association in September, January and May.

10. The applicant must state how much financial assistance is required to complete the proposed course of study. Payments will be made on a monthly basis during the period of which a Studentship is held.

11. All apparatus and materials purchased with grants are the property of the Canadian Dental Association, unless otherwise provided for in specific cases.

12. Part-time teaching in a university department or faculty may be considered favourably during the terms of tenure of the Studentship.

13. Interim reports on the student's progress may be requested from the Dean or head of the department in which the student is working. The Canadian Dental Association reserves the right to discontinue the Studentship after reasonable warning is given the student, if progress reports are unsatisfactory. The final report prepared by the student and supported by the Dean or head of the scientific department, indicating in some detail the results accomplished in the study, must be submitted to complete the tenure of the Studentship.

Address all communications to:

THE SECRETARY, Canadian Dental Association,
211 Huron St., Toronto, Ont.

New Brunswick Increases \$2.00

At the recent annual meeting of the New Brunswick Dental Association a resolution was passed increasing the annual grant to the C.D.A. from \$4.00 to \$6.00 *per caput*.

This is the fifth province to make an increase to the C.D.A. since the Annual Meeting and the first to go to \$6.00.

Industrial Dentistry

Increased interest is being taken in industrial dentistry as noted by the inquiries now being received.

The following policy was adopted at the last Annual Meeting of the Board of Governors:

POLICY ON INDUSTRIAL DENTISTRY

The Canadian Dental Association favours the establishment of Industrial Dental Services on the following basis:

PART I

Diagnostic Services

1. Placement and periodic examination of all employees with a view to early diagnosis for the elimination of disease of oral and systemic significance. X-ray examination and dental prophylaxis as aids in diagnosis are recommended.
2. Emergency service of a palliative nature is recommended.
3. The keeping of complete and accurate records is necessary.
4. Education in dental health including follow-up to encourage complete and regular dental services is necessary.

PART II

Treatment Service

In respect to industries desiring more than diagnostic services your Committee recommends:

- (a) That the employee should have the privilege of choosing his own dentist.
- (b) We believe better service is available through the channel of private practice in dentistry.
- (c) However, when an industry prefers a clinic type service we recommend that fair and adequate compensation be paid the dentist retained to ensure a quality service.

PART III

For the active operation of this service

- (a) All industrial clinics should be under the supervision of the provincial dental board concerned.
- (b) All requests for the formation of Industrial Dental Services be made by the employer or employees of the industry concerned.
- (c) All proposed plans for the establishment of industrial dental service be submitted to the provincial dental board for consideration and approval before being put into operation.
- (d) The best dental service can be rendered in the office of the private practitioner.

PART IV

Where and when the services of a legally qualified dental hygienist is retained this person should practise under the personal supervision of a legally qualified dentist.

Statement re Services Under Department of Veterans' Affairs

After an inquiry into the difficulties which have arisen respecting dental treatment services for ex-service personnel the Department of Veterans' Affairs has forwarded the following statement.

DENTAL TREATMENT

Department of Veterans' Affairs

The Division of Dental Services, Department of Veterans' Affairs, has been responsible for a very heavy task in providing authorized post-discharge dental treatment for ex-members of the Armed Forces. Without the whole-hearted cooperation of the Canadian dental profession and the very helpful attitude of the Officers of the Canadian Dental Association, the task would have been extremely difficult. For this kindly assistance from the Canadian Dental Association Officers and the cooperation of the profession, generally, the Department is very appreciative.

It has been found, however, in studying weekly reports from the District Supervising Dentists across Canada, that there are a few points common to all Districts where some individual dentists, by neglecting to conform to certain departmental requirements, are causing unnecessary correspondence with resultant delays in treatment and in the payment of accounts.

Here a few of the more common of these mistakes are discussed with the hope that the comments made may be helpful to dentists in dealing with departmental cases.

When a D.V.A. patient presents himself, and after examination you disagree with the diagnosis as outlined on D.V.A. Form 467R or you note that treatment in addition to that authorized is required, your recommendations accompanied by the Form 467-R should be forwarded immediately to the District Supervising Dentist or to Head Office, according to the place from which the authorization was issued, in order that consideration may be given to any changes permissible under the regulations.

In making recommendations for additional treatment or treatment of a type other than that authorized, please bear in mind the following regulations:

1. Bridges to replace teeth posterior to the

cuspsids or gold inlays to restore teeth posterior to the cuspsids are not permissible, except (a) where such appliances or restorations have previously been in situ, (b) when the patient is an ex-prisoner of war or where jaw injury has been conceded by the Canadian Pension Commission as attributable to service.

2. A maximum of four treatments for periodontal disease is allowed (five for Vincent's), and should the condition persist a report of the result obtained and a recommendation for further treatment may be forwarded to the District Supervising Dentist. When periodontal treatment is recommended, dental prophylaxis is to be considered as part of such treatment.
3. Recommendations for porcelain jacket crowns are to be accompanied by radiograms of the teeth in question. Private practitioners should not proceed with dental treatment for ex-service personnel for whom they have not received prior authorization, and emergent treatment should be given only when satisfied as to his or her eligibility, following the perusal of the discharge certificate or other official documents.

Ex-service personnel should be told to apply for dental treatment either in person or in writing to the District Supervising Dentist of his district who will investigate and, if eligible, he will authorize treatment accordingly. In any case where a general practitioner has received authorization and wishes to refer ex-service personnel to a specialist for an impaction or any type of oral surgery or periclasia treatment, he should send his recommendations to the District Supervising Dentist and *not* refer the patient to a specialist himself.

Dentists should not refer charts to other dentists by handing them to the ex-service personnel. This transfer must definitely be done through the office originally authorizing the treatment. This is necessary in order that the records may be changed.

When a dentist finds treatment other than that authorized on the ex-defence chart to be necessary, his additional recommendations should be made *clear* and *definite*, the number of the tooth and the location of the cavity should be stated.

Dentists should return all dental documents, including Form 467-R, to the office from which it was authorized. This also applies to correspondence. When filling in the last page of Form 467-R, the dates and records of the services should correspond with those filled in on Form 387. This will speed up the checking of accounts and help measure the authorization of payment.

When submitting accounts all authorized x-rays, for which payment is being requested, must be included. Some complaints have recently been made as to the delay in the payment of accounts. This is, in the majority of cases, the result of the following oversights on the part of the dentist:

1. The x-rays authorized, and for which payment is claimed, are not returned with the completed case, thus necessitating further communication.
2. Failure to complete Forms 387 and 467-R in sufficient detail.
 - (a) Tooth restorations must indicate the location of the cavity and the material used.
 - (b) Where attachments in bars are used in partial denture construction, they should be recorded.
 - (c) The notation "Work done as authorized" is not sufficient to meet the requirements of the Auditor-General's Department.

Dental Services Committee

A meeting of the Dental Services Committee was held in Ottawa, September 23-24, 1946, Dr. J. K. Carver presiding, to discuss the present re-organization of The Canadian Dental Corps, on a peace-time basis. After a detailed study of the matter it was decided that representatives of the Association should seek an interview with the Minister of National Defence and present three main points.

On October 3, Dr. Harvey W. Reid, representing the President, Dr. J. K. Carver, Chairman of the Dental Services Committee, and the Secretary met the Minister by appointment and presented the following Memorandum:

Memorandum re Peace-Time Dental Corps

The Canadian Dental Association, as the official representative of the dental profes-

sion in Canada, is keenly interested in plans to provide efficient dental services for the Armed Forces. At the beginning of the war, in 1939, it was the plans developed by this Association that were adopted and during the war years the full facilities of this Association were at the disposal of the Department of National Defence. The Association has always maintained a standing committee whose function was and is to assist and provide liaison between the dentists in the Armed Forces and the civilian profession.

This Association is most anxious to assist in any feasible manner toward the objective of forming a permanent Dental Corps of high calibre. In view of the fact that no peace-time Dental Corps previously existed, it is recognized that some unusual difficulties are presented. Our committee has given considerable study to the matter and desire to submit the following:

A. RATES OF PAY

As reported by prospective dental officers we believe that the rates of pay offered are inadequate to attract the proper type and number of personnel desired.

1. According to the published rates these do not compare favourably with those offered dentists in other departments of government and are considerably lower than the income to be derived from private practice.
2. The cost of the necessary educational training is in excess of other professions excepting that of medicine.
3. We are strongly of the opinion that the present equality of rates of pay for all Corps is no inducement for an individual to qualify by means of a dental education.
4. The highly specialized nature of a dental Corps indicates that special consideration is required in the matter of remuneration and that professional pay should be instituted in addition to the basic rates.
5. It is understood that an increase of pay is under consideration and we feel that immediate action is necessary in order to provide the required personnel not only at this time of reorganization but for the future.
6. Due to the commitments involved in beginning private practice, such as long term leases, purchase of expensive equipment and establishment of homes the number of

available personnel is rapidly decreasing to a point where the supply is extremely limited and consequently we believe that a favourable and early decision on the rates of pay is urgently requested.

B. AGE LIMITATIONS FOR SERVICE

It is noted that the published retirement ages are as follows:

Captains	47 years
Majors	49 "
Lt.-Colonels	51 "
Colonels	53 "

In the light of experience of the dental profession it is advised that the above age limits for retirements should be revised as follows:—

Captains	50 years
Majors	55 "
Lt.-Colonels	
and above	60 "

In support of the above the following reasons are given:

1. It is a recognized fact that the efficiency of an average member of the dental profession is reached after approximately 10 years of practice and maintained until 60 years of age. Consequently if a Captain or Major is to be retired at the ages of 47 and 49 respectively he will not have made his maximum contribution to the Forces.
2. The employment of dental officers cannot be compared with combatant officers because duties are different. While we recognize the desirability of youth in the services we desire to point out that in the professions emphasis must be placed on experience. It is well known that the greater percentage of dental personnel is always employed in non-combatant areas and in event of war the permanent dental officers would be required to form the administrative members of the enlarged Corps and not be employed with forward units.

C. SHORT-TIME COMMISSIONS

It is the considered opinion of the Association that there are definite advantages in the adoption of short-term commissions with termination gratuities. We strongly recommend that consideration be given to the authorization of a definite policy to this end.

The advantages to be gained are:

1. To create a well-trained reserve of officers available in time of national emergency.
2. To assist in filling established requirements.
3. To permit a degree of selection both at the time of initial appointment and later for long-term appointment.
4. The principle of short-term commissions is in effect in the British Armed Forces.

In conclusion may we stress the interest of the Association in the organization of a peace-time Corps which will adequately serve the Armed Forces. These recommendations are offered in the interests of creating the most efficient Dental Corps for the Armed Services. Representatives of the Association stand ready to discuss further elaboration of these points, at your convenience.

(Signed)

V. D. CROWE, *President*
DON W. GULLETT, *Secretary*

Convention Committee

The Convention Committee for the Convention to be held at Digby, June 24-27th next are actively engaged in making arrangements. Publicity will shortly begin to appear in the Journal and announcements should be watched for further details. Requests for reservations have already been received for a considerable number of rooms.

1948 Meeting

Plans must be made well in advance and it is time that consideration be given to the time and place of the 1948 meeting.

I would hazard a guess that the sale of patent medicines will continue to rise. After all no legislation can cope with superstition and stupidity. No orthodoxy can compete with the modern equivalent of the African witch-doctor.—A. H. Douthwaite, F.R.C.P. in Guy's Hospital Gazette.

Two problems, at least, confront the dentist today. One is the decline in interest rates, which makes investments somewhat precarious, and the other is the increase in the cost of living—or had you heard about that? Anyway, the point is that inflation is either here or just around the corner.—James H. Keith.

NEWS FROM THE PROVINCES

SASKATCHEWAN

Regina Dental Society

The officers for this year are:

President Dr. J. M. Riffel

Vice President Dr. B. S. Bookhalter

Sec.-Treas. Dr. C. Dixon

The first guest speaker for this year was the noted speaker, Rev. Father Murray of Wilcox, Saskatchewan.

Saskatoon Dental Society

The Society accepted with regret the resignation as secretary of Dr. Shirley Locke; Dr. Cliff. Hallett was elected in his place.

Saskatchewan Dental Council

The following is the personnel of this Council: Drs. W. M. Blair, Regina; D. L. Brass, Yorkton; J. L. Connell, Prince Albert; W. W. Irwin, Moose Jaw; M. J. MacDonell, Saskatoon; and L. J. D. Fasken, Regina, Sec.-Treas.

Drs. Brass and Connell were recently re-elected for a period of two years.

ONTARIO

The Story of Spadina Road Dental Building

A REHABILITATION CENTRE

Early in the War a sub-committee of the War Services Committee of the Toronto Academy of Dentistry had been formed for the purpose of helping to rehabilitate the dental officers retiring from the Military Services to private practice. At that time it was thought that the chief function of this committee would be to inform returning dentists of locations in the city, or elsewhere, that appeared to be good prospective openings. Long before hostilities ceased, it was realized that practically any location would be suitable but office space was not to be had.

The committee worked diligently, canvassing the dentists in practice, for spare rooms and extra chairs and for information of available office locations. They met with some measure of success, but it was quite apparent that all could not be accommodated

unless some sizable building could be secured to house a considerable number.

It remained for a civilian, Mr. St. Clair Miller of Edmonton, to start the ball rolling in the right direction. He was directed to Dr. G. V. Fisk, Chairman of the Rehabilitation Committee of the Canadian Dental Association, who in turn called the writer, the chairman of the local sub-committee. At this meeting Mr. Miller asked if there was a building presently used by the Government which would soon be vacated. Dr. Fisk suggested the Canadian Dental Corps Technical Training Centre on Spadina Road.

Mr. Miller immediately made enquiries and reported that he thought the premises were suitable and could be obtained. A meeting of the whole local sub-committee was called, and Mr. Miller presented a plan of organization to operate the enterprise. The Academy of Dentistry was asked to underwrite the scheme, but they considered that they did not have sufficient funds and also doubted that they had legal authorization to do so. Mr. Charles McKenna of the S. S. White Company, a very valuable member of the committee, then suggested that the Toronto Dental Dealers be approached to underwrite the venture. The dealers looked favourably on the proposition and offered to guarantee the financial undertakings, and to assume any loss incurred, and very generously offered to divide pro rata among the tenants any profit which might accrue. This was very stimulating to the committee but they still had not obtained the building. There were many other organizations wanting it. The Toronto Bible College, owners of the premises, were reluctant to rent to anyone, but finally agreed as a patriotic endeavour, to lease it for dental offices.

A difficulty then arose about getting the Government to release the premises and rehabilitate the building. A committee of three, Dr. Harold Swales, Dr. Vernon Fisk and Mr. Miller, went to Ottawa and obtained a sympathetic hearing from the proper authorities, which eventually led to the securing of the premises. But there were many details to be settled, which took many weeks, and during this period Mr. Miller dropped out



Spadina Road Dental Building

of the picture. A management committee of five members was then set up, two from the Academy of Dentistry, Toronto, two from the Dental Dealers of Toronto, and Mr. Charles McKenna who was to act as secretary and manager.

Mr. McKenna moved very quickly and efficiently, obtaining plumbers, electricians, carpenters and painters, to make necessary alterations; all applications for offices in the building were directed to him, and on February 14 he had his first tenant set up and in active practice. By March 1 there were sufficient applicants to ensure success of the venture.

This project was started with the intention of supplying desirable and properly equipped office space exclusively for dentists resuming private practice on retirement from active service. The management committee were unable, through insurmountable obstacles, to arrange for all the available space in the building to be converted into dentists' suites and offices. Originally the building had been one of the city's most stately homes, then a College devoted to the teaching of music, and later and during the early years of the late War, The Toronto Bible College (the

present owners) utilized it in the training of ministers and missionaries. Architects, contractors and service men were most helpful to our committee but were unable to suggest ways and means whereby more than twelve suites or offices could be provided for the use of dentists. Inability to supply natural light, water, gas, air and power prevented the entire building being utilized by dentists.

The decision to accept as tenants physicians and surgeons, who do not of necessity require all the services and facilities needed by dentists, was made. Presently ten dentists, one technical dental laboratory, and seven physicians and surgeons, will occupy space in the Spadina Road Dental Building. A cheerful, capable receptionist is on duty during office hours, and also renders supplemental telephone service for the tenants. A large well-furnished reception room is available for the patients of those dentists who occupy single rooms. Efficient janitor service is provided at no cost to tenants, oil heating provides ample warmth during the cold months.

A pleasant custom, originating in the Army, is being perpetuated; A.M. and P.M. coffee hours are a part of the daily routine at 11 A.M. and 4 P.M. Come and visit, preferably

at the coffee hour, some of your professional brethren, who are happy in their work and surroundings, and who less than a year ago were disturbed and worried over their difficulties in re-establishing themselves.

G. V. MORTON.

Academy of Dentistry, Toronto

This association held its annual dinner meeting on October 16 in the Royal York Hotel. President Dr. Colton Bliss and his co-workers had every last detail arranged for an evening's program very worthy of the society and one that everyone highly approved. There were in attendance some 350 members together with guests from out of town points.

Dr. Bliss was a very capable chairman. After words of welcome to all, particularly to members returning from military services, he made some timely observations. He urged more emphasis on a concept of dental care that will minimize the ravages of dental diseases through a program of prevention and early interception. He indicated the responsibility of the profession with respect to educating the public as to how they may reduce the incidence of serious dental disorders so prevalent today. He commended leaders in the profession for raising dentistry to its present high plane in Canada and in conclusion he said—"This next decade holds many opportunities for the dental profession. These are difficult and disturbing times, and we must not only give our attention to dental problems but we must take an active interest in municipal, national and international affairs. As professional men and women we are looked upon as leaders and we must assume responsibility in public matters. We must be good citizens as well as good dentists."

There were two honorary life memberships presented. One to Dr. R. Gordon McLean by Dr. E. A. Grant and one to Dr. William G. Trelford by Dr. Gordon Frawley.

Dr. Grant eulogized Dr. McLean for his life of service to his profession. "There is no important committee or organization in dentistry on which he has not served," said Dr. Grant. Dr. McLean was in active practice for 42 years, retiring in 1937. He was the first president of the Academy. Dr. McLean accepted the honour by a few well chosen



PRESIDENT SIDNEY E. SMITH
University of Toronto

remarks that indicated his great appreciation.

Dr. Frawley presented Dr. Trelford to his friends and colleagues after an absence of 7 years. Dr. Frawley was well qualified to speak of Dr. Trelford's military career and he very fittingly recited a fine record. In concluding his remarks Dr. Frawley said "I present to you Dr. William G. Trelford, an officer and a gentleman and a life member of this Academy." As Dr. Trelford approached the dais, it was a tense moment, as everyone rose to his feet and applauded a colleague who had given his best and was still very modest about it all. "Bill", as he is affectionately known to so many, spoke briefly acknowledging the kindness of the Academy members, and of the Ladies' Auxiliary to himself and the boys in England during the entire war. It was very evident he was unable to express what he had in his heart but the gleam in his smile meant more than any spoken word.

Dr. Sidney Smith, president of the University of Toronto was guest speaker. At the outset he indicated something of the prob-

lems of our University with its enrollment of 16,700 students, an all time high. He pointed out this overcrowding presented many difficulties in arranging adequate instruction to maintain our high standard of education. In professional education, Dr. Smith suggested it was easy to teach students "How" to do things but "why" they should be done that way is another matter and much more important. "Technical knowledge in the professions is necessary", said he, "but this is often emphasized too much at the sacrifice of studies in human relations". The speaker asked the questions "Are we as professional people seeking to understand the problems in our own community?" and "Are we satisfied with our contributions to public service?" There is great need for leadership and Dr. Smith urged that those who are educated in the professions should seek to translate their knowledge in terms of betterment of their fellows—"Build your contribution into the fabric of mankind," he said. Dr. Smith concluded by saying "Freedom from want and freedom from fear are not mere slogans but yearnings of the heart of man. Canada needs keen brains and well developed intellects to appreciate the problems of our people. Your interest will indicate the status of your profession as a learned profession—something more than a dentist, a lawyer or a physician. In such an appreciation the answer to our civilization may be found".

During the evening Dr. Harold A. Swales was presented with a past president's jewel by Dr. Harold Skilling. Presentations were also made to Mrs. L. R. Davidson, president of the Ladies' Auxiliary to the Academy, Miss Anne Kirkland and Miss Tomye Turner of the Dental Nurses & Assistants' Association, Miss Barbara Booth of the Dental Nurses' Alumnae.

Tribute to

LIEUT.-COL. W. G. TRELFOED

by

MAJOR J. S. WILKINSON

The First Great War commenced soon after Dr. Trelford graduated and his career ever since has been associated with military dental service. He joined the Canadian Army Dental Corps on its formation, being the second officer posted to Military District No. 2.

In December of 1915 he was appointed Assistant Director of Dental Services of that district, but relinquished the appointment to serve overseas with Dr. Guy Hume in the dental treatment of jaw injuries. Dr. Trelford proceeded to France early in 1917, and served there until the end of the War of 1914-18.

Returning to Canada in 1919, Trelford was associated with the late Prof. W. E. Cummer in a special clinic for jaw injury cases. He joined the school staff of the Royal College of Dental Surgeons of Ontario as a demonstrator and retained this post as he established his civilian practice. Later he became associate professor of periodontology under Dr. H. K. Box.

Military authorities at Toronto persuaded Trelford to maintain his association with the army dental service. In at least one year he was the only dental officer in Canada who actually rendered service at a military camp. About 1930 he became the Senior Dental Officer of M.D. 2.

Dr. Trelford found time to participate in many dental activities. He has presented papers and clinics in Ontario, U.S.A. and before the American Dental Society of Europe at Amsterdam. He served as President of the Toronto Central Dental Society, was a Member of the Board of Governors of the Ontario Dental Association, and in 1939 was President of the Toronto Academy of Dentistry.

In 1938, Dr. Trelford, and his junior officers in M.D. 2, Drs. H. G. Bean, W. F. Armstrong, and F. M. Lott, commenced formulating a new set up for the Canadian Military Dental Service. Trelford devoted considerable thought, time, and money to this project, but Dr. Lott requested the other officers to withdraw as he wished to receive a credit on this subject in his submission for a Ph.D. degree. However, Trelford was approached from time to time in an advisory capacity and, when the report was accepted by the Canadian Dental Association he went to Ottawa with a committee to urge its adoption by the Government.

At the outbreak of the Second Great War, Trelford was appointed District Dental Officer of M.D. 2, with the rank of Lieutenant-Colonel. He accepted a reduction in rank

to Major to take command of the 1st Divisional Dental Company that proceeded overseas in December of 1939. The mid-winter voyage on an unheated ship was a harsh ordeal for this group of dental officers, but after a brief rest Trelford plunged into the maelstrom of problems confronting the pioneer overseas dental company. At first there was only one vehicle, a panel truck, available for the entire company. Later, 1st Canadian Division Headquarters requisitioned a rather aged civilian car for his many visits to the widespread dental detachments.

By February of 1940 the Canadian troops in England approximated the strength of two divisions, and these men had received little dental attention in the army before going overseas. There were only twenty-four operators available to serve them, including dental officers on the strength of hospitals and other medical units. Thus it was necessary to move dental detachments from one unit to another at fairly frequent intervals, and it required great tact to propitiate unit commanders temporarily deprived of their dental officers.

Another difficulty in the early overseas period arose through a senior officer taking the stand that the Canadian Dental Corps, like its British counterpart, was directly under command of the Medical Corps. Trelford, as a Major, was handicapped in that army conferences sometimes excluded officers below the rank of Lieut.-Col.

The extremely amicable relations that Trelford established between the Medical and Dental Services, without any loss of dental prestige, are a great tribute to his diplomacy, perseverance, and general ability. The Director of Medical Services, overseas, Major-General Luton, was most co-operative always consulting Trelford on all matters, affecting the Medical Services. Incidentally, Trelford deserves credit for obtaining the splendid dental equipment installed at Taplow where the hospital equipment was all supplied by the Canadian Red Cross Society.

Trelford was provided with only one officer for the triple duties of adjutant, quartermaster, and paymaster when first overseas, although he was responsible for the administration of several dental detachments besides those in his company. At that time a



LIEUT.-COL. W. G. TRELORD, V.D.

full range of dental supplies was not available from Canada, so Trelford had to obtain English sources of supply.

There were many other difficulties in the first six months of overseas operation, featured by the collapse of France with consequent reorganization and movement of the Canadian Forces in England. Trelford's efforts to meet all circumstances was appreciated by his dental officers who achieved exceptionally high records of treatment in spite of the handicaps peculiar to this period.

In August of 1940 Trelford received orders to report to Canadian Military Headquarters in London to serve as A.D.D.S., at which time his rank of Lt.-Col. was restored. At C.M.H.Q. he had the following duties.

- (a) Administration of the entire overseas Canadian dental service for army, navy, and air-force.
- (b) Dental adviser to C.M.H.Q. with responsibility for technical advice on all dental matters.
- (c) Direct command of Intermediate Overseas Base. This included all C.D.C. person-

nel serving Canadian forestry units in Scotland, all serving with hospitals, convalescent depots, and casualty clearing stations, in addition to all serving in reinforcement units.

For all of these duties Trelford had only two assistant officers for a year, an adjutant and a quartermaster—both selected by C.D.C. headquarters at Ottawa. After a year in his post Trelford was permitted an additional officer assistant chosen by himself. At this time, C.D.C. orders were drafted under Trelford's supervision for direct transmission to the overseas dental companies. It is notable that many of the provisional orders drafted in 1941 were incorporated verbatim in the overseas Dental Manual issued in 1943.

When the number of Canadian troops in England permitted forming a Canadian Corps, Trelford requested the immediate appointment of an A.D.D.S. at Corps Headquarters. General McNaughton agreed to this appointment in principle, but stated that Trelford's administration from London had been so satisfactory that for the time being he wished to continue under that arrangement.

In 1942 the dental branch of Canadian Military Headquarters doubled its office staff, although divested of many responsibilities when separate A.D.D.S. appointments were made for each of the following overseas headquarters: First Canadian Army, Reinforcement Units and R.C.A.F. Trelford was appointed A.D.D.S. Canadian Reinforcement Units. He had responsibility for the dental treatment of all reinforcements of the Canadian army and made persistent efforts to improve the service but was handicapped by the limited number of operators available.

On October 25, 1945, Colonel Trelford was awaiting return to Canada when he was stricken with coronary thrombosis. On June 15 of 1946 he was released from Chorley Park Hospital but is still an out-patient of Christie St. Hospital.

Col. Trelford is the dentist who has the longest record of overseas' service in this war. In the two Great Wars his period of active service totals 12 years. And this record is supplemented by continuous service with the Militia in the interval between wars.

Kingston Board of Health

It is reported that this Board proposes expansion of dental services in the elementary schools. Dr. Allan R. Cooke has been in charge of dental services and has been giving two half days each week for dental survey work and emergency service. He reported this was entirely inadequate and suggested retaining three additional dentists to give one half day each per week. This would be equivalent to a dentist devoting half his time to school services. Dr. Cooke will continue to examine the pupils, while his newly appointed associates will give treatment. It is expected the service will do more than care for emergencies; it is hoped a greater conception of the value of dental care will be understood by both child and parent, as the result of health education promoted by the new dental staff.

Toronto Ladies' Auxiliary

Mrs. L. R. Davison, President of the Ladies' Auxiliary to the Academy of Dentistry, presided at the opening luncheon at the Royal York Hotel, September 19. Mrs. R. G. Ellis introduced the guest speaker Dr. Gordon Agnew and Mrs. A. J. McDonagh thanked the speaker on behalf of the assembly. Mr. George Chow, soloist, and Mrs. A. J. Brace, accompanist, were the guest artists.

The Annual Membership Tea was held at the home of Mrs. S. S. Crouch October 17 from 3 to 6 p.m. Guests were received by Mrs. L. R. Davison, President, Mrs. S. S. Crouch, Mrs. M. G. Boyes and Mrs. H. J. Mullett who will leave shortly to join her husband in Chengtu, China. Presiding in the tea room were Mrs. R. W. Matchett, Mrs. F. L. Dayment, Mrs. E. T. Guest and Mrs. K. R. Harris. Members of the Executive Committee assisted. A "Bon Voyage" gift was presented to Mrs. H. J. Mullett by Mrs. L. R. Davison as a token of esteem and goodwill on behalf of the Auxiliary. MARGUERITE BOYES

Hamilton

At the Ancaster Golf Club on September 11, the dentists of Hamilton and district held their Fall tournament. The prize winners were as follows:—1 Low Net, Earl Jackson; 2 Low Net, Hugh Smith, Brantford; 3 Low Net,

Col. Dwight S. Coons; 1 Low Gross, J. Grant Countryman; 2 Low Gross, Cliff Mason; 3 Low Gross, F. W. Vivian.

Best nine holes, J. W. Stewart; Putting contest, F. L. Williamson; Birdies, Grant Countryman and Cliff Mason.

QUEBEC

Société de Stomatologie de Québec

Elections for the Executive Committee of the Société de Stomatologie de Québec have given the following results: President, Rodolphe Talbot; Vice-President, Antonio Reny; Secretary, Jules Hamel; Librarian, R. Huot; Treasurer, Emile Bourdon.

Société Dentaire des Trois-Rivières

The Executive Committee for the academic year 1946-1947 is as follows: President, Roméo Beaudry; Vice-President, Conrad Godin; Treasurer, Réal Lamothe; Secretary, Roland Barbeau.

The Society is to hold, during the year, several meetings where invited guests will address dentists from that district on dental matters.

Société Dentaire de Montréal

The guest speaker for the September meeting was Dr. Jules Thébaud, former Dean of the Dental School of Port-au-Prince, Haiti, who addressed the members on the following subject: "Periodontology, its Modern Trend".

The October meeting brought Doctor James Franklin, who talked about "Observation on Dental Treatment of Jaw Injuries". A large attendance was on hand for both meetings.

Faculty of Dentistry, University of Montreal

The number of new students for the coming year has been exceptionally large. Sixty scholars were admitted to the course. A large number of others had to be set aside, as the facilities of the new school can not accommodate more than the number received.

Board of Governors

The Board of Governors for the coming two years will be constituted by the following members: *Montreal East District*, C. Archambault, C. A. Contant, Claude de Grandmont, Jacques Demers, Victorien Dubé, J. Armand

Fortier, J. Maurice Gosselin, Yves Lafleur, Adolphe L'Archevêque, Gabriel Lord, Lt.-col. P. Manseau, Albert Surprenant, Ephrem Vinet. *Montreal West District*, J. W. Abraham, G. G. Armitage, J. K. Carver, W. E. Charland, M. L. Donigan, C. I. Finklestein, Denis Forest, O. A. Lefebvre, J. W. Morton, N. Solomon. *Quebec District*, L. P. Goulet, D. Viger Plamondon, Gustave Ratté, D. Roy. *Three-Rivers District*, M. Lafontaine, R. Trudel. *St. François District*, Valmore H. Olivier, H. T. Southworth.

NOVA SCOTIA

Halifax Dental Society

October 4.—The following officers were elected for the ensuing year at the first dinner meeting of the season:

President	Major G. M. Logan
Vice-President	Dr. G. N. Stults
Sec.-Treas.	Dr. L. J. Archibald
Auditors	Drs. S. K. Oldfield and F. C. Fennell

The retiring president, Dr. F. W. Johnson, reviewed the proceedings of the past year, which had been very successful. Dr. MacGuigan announced that the dental services rendered school children through the generosity of the Kinsman's Club will again be carried on this winter. A vote of thanks was passed in appreciation and forwarded to the Club.

The speaker for the evening was Dr. O. L. Croft, who gave a paper on Oral Diagnosis. The conception and treatment of the subject was most comprehensive and interesting, provoking much discussion. W. C. O.

NEW BRUNSWICK

Convention of New Brunswick Dental Society

The 51st annual convention of this Society was held at the Admiral Beatty Hotel, Saint John, on September 16-17 with Dr. J. B. O'Brien, the president, in the chair.

Dr. Maurice E. Peters of Boston gave an illustrated and very lucid lecture on "Controlled Dentistry". Dr. Max H. Jacobs also of Boston, whose specialty is oral surgery, gave a very instructive and "brain duster" talk on oral pathology, using excellent coloured slides.



Prominent Dentists and Dental Officials attending the Annual Convention of the New Brunswick Dental Society.

Front row, left to right: Dr. M. E. Peters, Boston, clinician; Dr. V. D. Crowe, Truro, President of the Canadian Dental Association; Dr. James B. O'Brien, Saint John, President of the New Brunswick Dental Society; Dr. M. H. Jacobs, Boston, clinician; back row, left to right: Dr. W. W. Woodbury, Halifax, Dean of Dalhousie University School of Dentistry; Dr. H. W. MacDonald, Saint John, New Brunswick representative to the Canadian Dental Association; Dr. F. C. Bonnell, Saint John, New Brunswick representative to the Dominion Dental Council.

Dr. W. W. Woodbury, Dean of Dentistry at Dalhousie University, spoke of dental education and the future of the dental profession. Dr. V. D. Crowe, president of the Canadian Dental Association, spoke on the plans for the fifty-second annual convention to be held in Digby in 1947. A most interesting and instructive talk on the "Transition of Dentistry" was given by Dr. D. W. Gullett, Secretary of the Canadian Dental Association. Dr. Gullett had some very interesting statistics which he had compiled relative to dentistry and dentists in Canada.

The visiting ladies were entertained at a luncheon at the Riverside Golf Club.

The convention closed with a very genial dinner with Dr. Simms as chairman, at which all members and ex-members of the Canadian Dental Corps were guests. A very useful gift was presented to each of the Canadian Dental Corps members.

Of interest at the Annual Business Meeting was the fact that the grant to the Canadian Dental Association was raised from \$4.00 to \$6.00 *per caput* which was higher than any other province. The next annual meeting of the New Brunswick Dental Society will be held concurrently with the Canadian Dental Association annual convention at "The Pines" in Digby, Nova Scotia, in June, 1947.

The incoming officers elected were:

President Dr. T. G. Manning, Saint John.

Vice-President Dr. Theo Godin, Campbellton.

Secretary Dr. S. K. Wetmore, Saint John.

Delegates elected to the Council of Dental Surgeons of New Brunswick were: Drs. J. B. O'Brien, Saint John; T. H. Lewis, Woodstock; F. L. Miller, Fredericton; B. R. Ross, Fredericton; A. J. Coughlan, Saint John; K. G. Williamson, St. Stephen; R. E. McClintock.

tock, Centreville; A. LeBlanc, Moncton; J. F. Edgcombe, Saint John; L. F. Allanach, Moncton; F. C. Simms, Edmundston; R. H. Bingham, Moncton; J. R. Dowd, Sussex; and H. G. Vaughan, Chatham.

BRITISH COLUMBIA

Vancouver & District Dental Society

The largest regular meeting in the history of the society greeted the new president Dr. John Ingledew as the new season opened with a dinner at Hotel Vancouver on October 1.

A particularly good clinic was presented by the Portland Prosthetic Study Club, the subject being; "Fournet Upper and Lower Impression Technique." Dr. Saul Robinson, the instructor of the club, gave a preliminary talk, illustrated with colour slides, after which the members of the club conducted a progressive clinic showing the different steps in the Fournet Impression Technique.

The following are the members who took part in the clinic:

Mouth Examination for	
Tray	Dr. G. Redpath
Trimming Lower Tray	Dr. S. Gortler
Finished Lower Impression	Dr. C. L. George
Preliminary Impression for	
Relief	Dr. E. J. Hagan
Trimming of Upper Automatic	
Relief Tray	Dr. B. Logeson
Final Upper Impression Auto-	
matic Relief Tray	Dr. J. E. Hagan
Denture Space	Dr. O. T. Howard
Approximate Bite	Dr. C. Liebe, <i>President</i>
Free Space and Corrected Occlusal	
Relation Record	Dr. M. A. Milligan
Eccentric Relationship	Dr. M. Skiff
Master Clinician	Dr. S. Robinson

The Society was very appreciative of the efforts put forward by these men.

The following study clubs reported organization plans and meeting dates:

Diagnosis	Dr. C. Whitworth
Prosthetics	Dr. George Nimmons
Dental Medicine.....	Dr. M. Walley

Dr. Warshawski a graduate of the University of Alberta was elected to membership in the society.

Vancouver Dental Assistants' Association

On July 15, the V.D.A.A. held a dinner meeting at the Sports Pavilion, Stanley Park, with 35 girls attending.

Our delegate and President, Miss Rita Cowan, gave us a full report on the Ontario and C.D.N. & A.A. Convention. She gave a very interesting talk and we are all very proud to know that she had been elected to the office of 2nd Vice-President of the C.D.N. & A.A. An enthusiastic vote of thanks was extended to Rita Cowan on the suggestion of Mildred Armstrong. It was decided at the meeting to open an operative registry for dental assistants as a convenience to the doctors which has proven to be quite an undertaking, and so far has been working out very well. We eventually hope to have a complete registry.

Fifty-six girls attended the September meeting at which Dr. R. L. Pallen, Past President of both the C.D.A. and Vancouver & District Dental Society, member of the Executive Council of Dental Surgeons of B.C., member of the Board of Governors and the Executive of the C.D.A., as well as being Doctor in charge of the Dental Dept. of Public Health for Greater Vancouver, spoke to the girls.

Dr. Pallen's address was most interesting and we now have a much clearer concept of the work of a school doctor and nurse. Dr. Pallen also spoke on the importance of organizations, local, provincial and national and gave us something to strive for in our own society. He extended a very cordial invitation to the members of the association to attend the school clinics even offering to take three or four girls around each week himself. I'm afraid Dr. Pallen is going to be kept extremely busy in view of the enthusiasm of the girls.

Betty Durant is arranging for the girls to visit veterans at Shaughnessy Hospital.

We wonder if the socks fit Dr. King and what Dr. E. E. Martin did with the Mystery Prize!!

RITA RUSSELL

ALBERTA

Edmonton Dental Society

October 1—Sixty members and guests were in attendance with Dr. J. C. Ward, President, in the chair.

Dr. Ambrose O'Neill gave an excellent paper on the "*Principles of Muco Static Impressions*". The large attendance present indicated the interest in this subject.

During the evening the Edmonton Dental

Society Scholarships were presented to Mr. L. Soloway, and Mr. M. M. Derinuk for the highest standing in the First and Third year Dentistry respectively. These two students were the special guests of the Society for the evening.

R. A. MCEWEN

EMPIRE NEWS

GREAT BRITAIN

British Dentistry

An address by the President of the British Dental Association, Dr. J. B. Parfitt, upon his retirement from office, brings to light the fact that under the present national health insurance service six teeth are removed for every tooth that is saved and "in consequence of previous dilapidation a twelve-tooth denture is inserted." This condition is attributed to lack of education of the population and a woeful lack of dentists. The newly proposed national health insurance service only will make a bad matter worse, according to Dr. Parfitt. He finds two dangers: one is that the attempt to expand the service over greater areas of population will produce a serious sacrifice in quality; second, red tape and the enslavement of the human personality by a machine of its own construction leads to stagnation. The words are slightly reminiscent of views expressed by dentists in this country.—*Journal of American Medical Association*, Aug. 31, 1946.—per *F. Review Chi. D. Soc.*

Scale of Fees

The Joint Advisory Dental Council has advised each member of the profession as follows: "You are advised to tell your Dental Benefit patients forthwith, if you have not already done so, that their dental letters cannot be accepted but that you are willing to carry out the treatment at their cost in accordance with the scale rejected by the Ministers.

Br. D. Jour., Sept. 20, 1946.

SOUTH AFRICA

Dental Clinics

Condensed from Editorial in S. African D. Jour.

Presumably these institutions were first established to meet a serious social evil—the urgent dental needs of those not in the fortunate position to be able to pay the average fees of private practice.

At the last election of the Northern Transvaal Branch, an entirely new selection of members were elected to the Pretoria Clinic Board. These men were immediately confronted with the difficult position of a diminishing full-time staff, until to-day it is non-existent. They appreciated the resignations were chiefly due to the low salaries offered compared to conditions prevailing in private practice. They know from past experience that the Clinic has a wonderful opportunity to render valuable service to those who sadly need it most but who can command it least.

The Provincial Secretary, apparently unashamedly and with much confidence, admitted it was not the object of the Province to attract outstanding and progressive men to these posts. What was originally visualized was the opportunity offered for men incompetent to attain success in other forms of competitive practice, to fill these posts, hence the standard of the salaries offered. (It sounds like a home for incurables and incompetents instead of an Institution for Public Health Services.) He further intimated, on being told that no applications for the posts had been received, that the Province would be prepared on the lines of the American manufacturers to close the Clinic down until such time as an economic depression would compel the least successful to apply for these posts—apparently havens of peace and security! What a deplorable attitude to adopt towards any health measure.

This disparaging and deplorable attitude towards the Healing Professions is almost invariably displayed when "official" lay minds exercise any financial influence over the activities of the professions. The spirit of Officialdom and the Healing Professions are, essentially, as far apart as the Antipodes, and the sooner the professions realize this, the better it will be for them and the public whom they serve.

GENERAL NEWS

R.C.A.F. Benevolent Fund

The R.C.A.F. Benevolent Fund was created from the voluntary contributions of R.C.A.F. personnel, interested civilians, and canteen profits at R.C.A.F. units. Its purpose is "To relieve distress and promote the well being of R.C.A.F. and Ex-R.C.A.F. personnel and the dependents of both".

Many applications handled by the Fund deal with dental treatment. Where a case which appears to warrant assistance from the R.C.A.F. Benevolent Fund comes to the attention of a dentist the matter should be referred direct to the Head Office, Ottawa, Ontario. If possible such reference should be made early in the course of treatment or investigation. The Fund is pleased to assist applicants in these cases if need for assistance is found to exist. An unembarrassing investigation will be performed by the Fund's local representative. The Fund has decided to settle accounts rendered in accordance with the scale of fees as approved by the Department of Veterans' Affairs.

Where it is indicated that a patient may require assistance the dentist should be cautioned as to the type of service he recommends as the Fund must necessarily limit its aid to non-luxuries. Where applicants can avail themselves of clinical treatment they should be encouraged to do so as assistance from the Fund in these cases will normally be restricted to the nominal fees charged by these clinics. In all cases the applicant will require a detailed statement of account for attachment to his application form. The same terminology as in the D.V.A. scale of fees is to be used.

Addresses of R.C.A.F. Benevolent Fund Representatives in the various Districts of Canada may be obtained from the Head Office of the Royal Canadian Air Force Benevolent Fund, Ottawa, Ontario.

Conference on Dental Health in U.S.A.

Plans have been completed for a three-day conference on dental health planning to be held in Columbus, Ohio, under the joint sponsorship of the Council on Dental Health of the Ohio State Dental Society and the

Council on Dental Health of the American Dental Association. The tentative dates are December 6, 7 and 8.

Dental Treatment For U.S.A. Veterans

Any dentist who is recommended by the state dental society and who agrees to work for fees stipulated in the state agreement is eligible to treat veterans.

No over-all program has been established for the nation. Instead, state-wide agreements have been negotiated between the Veterans Administration and dental societies. Differences have been allowed in fee schedules in order to meet varying local conditions.

It is estimated that 20 million discharged servicemen from both World War I and World War II are eligible for dental benefits under the new program.

Veterans seeking dental treatment at government expense must receive prior authorization at the Veterans Administration office in their home communities except in emergency cases.

Four classes of discharged servicemen are eligible for dental treatment.

1. Those out-patient and in-patient veterans who have a service-connected disability.
2. Those out-patient and in-patient veterans having a dental condition not service-connected, but medically determined to be aggravating to an associated systemic disorder that is service-connected.
3. Those receiving domiciliary care. (They are given complete dental service.)
4. Those pursuing an authorized course of vocational training under the vocational rehabilitation program established by congress in 1943, and whose training would be interrupted by lack of dental care.

In addition, all dental disabilities existing within one year after discharge may be considered to be service-connected, unless such defects were recorded at the time of enlistment. To be eligible for treatment under this ruling, the veteran must have served at least six months of continuous military service during war time.

Brushing Teeth

The average American takes approximately 267 strokes to brush his teeth but almost never reaches the sides of the teeth next to his tongue!

The average time consumed is 67 seconds about one-third of the three minute period recommended as a standard by dentists. Strokes average 4.7 per second.—Dr. Hamilton B. G. Robinson in *Jour. of A.D.A.*

Colour Effectiveness

From Press Release by Canadian Paint, Varnish and Lacquer Association

Modern experiments show that colour is a modern therapeutic agent in hospitals, and can have an important effect upon the comfort, happiness and physique of those who are well. A shoe manufacturer painted all black machinery a light grey and moving parts a light buff obtaining better visibility, production rose 25 per cent and accidents fell off 70 per cent. Stenographers in an office building painted blue complained of feeling cold in winter. The walls were painted a creamy buff and there were no more complaints although the room temperature was the same. Green tends to prevent air sickness; browns and yellows tend to produce it. Colour is important.

Subacute Bacterial Endocarditis

A comparison has been made of the lesions of the heart in subacute bacterial endocarditis in twenty-two patients treated with penicillin and eight patients given no specific therapy by Robert A. Moore, M.D., Department of Pathology, Washington University School of Medicine, St. Louis.

He states that penicillin promotes healing in subacute bacterial endocarditis, but the basic processes of healing are not modified. These processes are: covering of the exposed surface of the vegetation with fibrous tissue, invasion of the layer of colonies and phagocytosis of bacteria, calcification of bacterial colonies, hyalination and calcification of the central core of the vegetation, and endothelialization of the spaces and clefts in the vegetation.

In some patients, healing is accompanied by excessive calcification, and the result is a calcific stenosis of the valve.

It is postulated that the vegetative lesions of subacute bacterial endocarditis consist of two parts: a nonbacterial (rheumatic or thrombotic) primary part, and a bacterial secondary part.—From *Transaction of the College of Physicians of Philadelphia*, June 1946.

IN MEMORIAM

Wm. Edward Romph, of Hamilton, Ontario, aged 40, died October 3.

He was graduated from the School of Dentistry of the University of Toronto in 1928, and has practised in Hamilton since graduation. He was a lifetime resident of the city. He was a member of the Hamilton Dental Association and a member of St. Phillip's church.

Dr. Romph is survived by his parents.

James Francis McDonald, of Hamilton, Ontario, aged 73, died on September 28.

He was graduated from the Royal College of Dental Surgeons of Ontario in 1905. He practised in Hamilton since graduation.

He was an honorary life member of the Hamilton Dental Association.

He was a member of the Masonic Order and past Master of the Acacia Lodge. He was member of the Hindoo Koosh Grotto, and a member of the Beaver Lodge, Knights of Pythias.

Dr. McDonald is survived by his widow, one step daughter and three brothers.

Richard William Hull, of Toronto, Ontario, aged 65, died October 14. He was graduated from the Royal College of Dental Surgeons of Ontario in 1905.

He was a member of the L.O.L. and a past master; also a life member of York Masonic Lodge; and a member of the Granite Club.

Dr. Hull is survived by his widow, three daughters, two sons, a sister and a brother.

Contribution à l'Amélioration du Matériel Chirurgical Employé dans le Traitement de la Pyorrhée Alvéolaire

par: JULES THEBAUD

**NOTE DE LA REDACTION: NOUS SOMMES HEUREUX D'OFFRIR A NOS
LECTEURS LE TRAVAIL, QUI A VALU A SON AUTEUR LE PRIX
CASGRAIN-CHARBONNEAU 1946.**

1ère partie

Présentation de quelques nouveaux in- struments utilisés dans la périodontie clinique

L'auteur se propose, dans cette étude, d'analyser l'efficiencie des instruments employés dans le traitement chirurgical de la pyorrhée alvéolaire, de signaler les lacunes de cette méthode, lacunes amenées par l'insuffisance de certains facteurs techniques d'ordre matériel et de présenter, en même temps, quelques instruments conçus, façonnés et expérimentés à titre de contribution à la Périodontie opératoire.

Les autres modes de traitement de la paradentose ne seront pas discutés; non parce qu'ils sont jugés moins bons ou moins complets, mais parce que la méthode chirurgicale nous intéresse ici, d'une façon particulière, parce qu'elle est maintenant standardisée, qu'elle est en passe de subir une vulgarisation considérable en raison même de ses avantages et de ses principes, qui sont liés au principe intégral de la chirurgie, enfin parce qu'elle occupe une place légitime dans la pensée des cliniciens qui se sont occupés de la thérapeutique des affections

du paradentium, quelqu'en soit leur degré d'avancement.

Base des recherches entreprises

Les bases de ces recherches, visant à l'amélioration du matériel chirurgical employé dans le traitement chirurgical de la paradentose, ont été posées depuis quelques années. La première partie de ces notes se rapporte à la présentation de quelques instruments expérimentés pendant deux ans.

La deuxième partie qui se rapporte au matériel spécial destiné à la suture de la muqueuse gingivale après le curetage radical, diffère d'un *Travail Préliminaire* sur le même genre d'instruments, présenté au Congrès Dentaire International de Vienne, en 1936, où il a été analysé et critiqué. Cette analyse critique des principes exposés, à cette époque, a permis de reprendre ce projet d'étude sur une base entièrement différente.

Le travail préliminaire sur les instruments spéciaux pour la suture de la muqueuse gingivale, n'avait été exposé que par la présentation d'un film exhibé à Vienne, à Montréal et à la Havane. Cette étude contenant donc nos *premières notes écrites* sur les idées, que nous

énonçons au sujet d'une technique personnelle, demeure encore revêtue du cachet de l'inédit.

Tous les instruments, décrits ici, ont été fabriqués par l'auteur, qui s'est conformé, autant que possible, à la *Configuration Anatomique* des dents et des maxillaires, dont il s'est servi comme mannequin. Ils ont été fabriqués en argent, sauf les 3 instruments utilisés pour la suture de la gencive qui ont été coulés en métal inoxydable dans les ateliers de la S. S. White Company, d'après des modèles en argent fournis par l'auteur.

Les patients, sur lesquels ont été expérimentés en premier lieu ces instruments, ont été fournis par l'Assistance Publique, dans une Ecole Dentaire. Il sera fait mention au cours de la présentation de ces instruments, de leur forme et de leur utilisation durant les diverses phases des opérations auxquelles ils sont affectés.

Considérations générales

Bourdét et Riggs, avant l'entrée du siècle, ont été les premiers à pratiquer cette sorte d'intervention, mais une trop grande mutilation des tissus gingivaux en résultait du fait que la technique, qui à ce moment n'était pas bien ordonnée, ne visait pas assez à l'élimination des désordres pathologiques du paradentium.

Dans les environs de la première guerre mondiale, Neuman et Black, et un peu plus tard, Ward, Sanders et d'autres, ont contribué largement à apporter une base scientifique à ce mode de traitement de la paradentose, en conjuguant leurs efforts dans le but bien déterminé d'extirper les grappes infectées de mononucéaires, de réduire les culs-de-sac et de cureter les parties nécrosées du ciment et du bord alvéolaire.

C'est ainsi que deux méthodes bien distinctes ont été créées; et qu'elles ont même contribué, tout au début, à la formation de deux écoles, dont l'une pratiquait la gingivectomie et l'autre, le curetage radical avec dissection de la gencive. Les principaux chefs des deux écoles se sont cependant rejoints dans leur intention de donner un caractère

définitif à la thérapeutique chirurgicale, en formulant des phases classiques dans les deux techniques.

Aujourd'hui les deux formes d'intervention sont couramment pratiquées sans distinction d'école ou d'opinion.

Certains cliniciens se limitent à la seule pratique du curetage radical; tandis que d'autres ont généralement recours à la gingivectomie, *sauf parfois pour les interventions dans les régions antéro-inférieure et antéro-supérieure*, où, pour ménager l'esthétique en évitant la récession gingivale, on entreprend le curetage sous-muqueux.

Les deux techniques chirurgicales

Il est bon de rappeler que, dans (a) la gingivectomie, le *modus operandi* demeure encore invariable depuis une vingtaine d'années; la gencive est sectionnée horizontalement du côté buccal et du côté lingual, à l'emporte-pièce, afin de détacher les tissus pathologiques à peu près au niveau de la profondeur des culs-de-sac, et pratiquer en même temps le curetage de l'os alvéolaire et du ciment; et dans (b) le curetage radical avec écartement de la gencive, tel qu'il a été formulé au cours des premières interventions faites par Neuman et Zentler, la technique demeure aussi la même dans ses grandes lignes. Après la dissection délicate de la gencive, du côté buccal et du côté lingual, sur un tiers ou sur la moitié de l'une des arcades, la dissection et l'exposition des éléments du paradentium permet de pratiquer l'ablation des tissus nécrosés, après quoi les deux parties de la gencive sont ramenées, en place et fixées au moyen de sutures. Cette opération est donc faite en quatre mouvements.

Il ne s'est pas produit de scission au sein des partisans de cette dernière technique, mais pour parer aux complications de périécémie et d'ostéite qui résultent parfois de l'infection sous-jacente des parties disséquées de la gencive, dont le contact étroit avec l'os n'est pas toujours complet, Kirkland et d'autres ont conseillé le *curetage radical modifié*.

Une variante utile fut apportée à la

méthode de Neuman tout en conservant les mêmes mouvements, phase par phase. Il s'agit donc de la même méthode, sauf en ce qui a trait à la dissection de la gencive qui est moins étendue et qui s'exécute d'une façon très modérée. La visibilité du champ opératoire est de beaucoup diminuée, mais cet inconvénient peut être largement compensé par un éclairage plus intense du foyer opératoire et par l'emploi de la loupe pour magnifier l'aspect des tissus exposés. (Dessins 1 et 2).

Curetage Radical Modifié

Ce changement apporté à la méthode

CONSIDERATION SUR LE MATERIEL COURAMMENT EMPLOYE EN PERIO- DONTIE CHIRURGICALE.

Dans leurs préoccupations de donner une forme stable et scientifique à la gingivectomie et au curetage radical, les cliniciens en périodontie opératoire n'ont pas manqué, dans leur enthousiasme et dans leur comportement scientifique, de préconiser pour les périodes pré-opératoire et post-opératoire une thérapeutique de première valeur.

Cependant, le matériel spécialement recommandé et présenté pour ces deux



Curetage radical ou "flap opération" d'après Neuman

de Neuman s'est produit avec un certain avantage. Et c'est à cause de son allure réservée et des garanties qu'elle comporte que cette technique modifiée a presque obtenu le suffrage de la profession.

Aussi, chaque fois qu'il sera fait mention dans cette étude de curetage radical ou de "flap opération", il s'agira plutôt de la technique radicale, qui a été modifiée.

sortes d'intervention, s'il est pratique, n'est pas complet et pas assez varié.

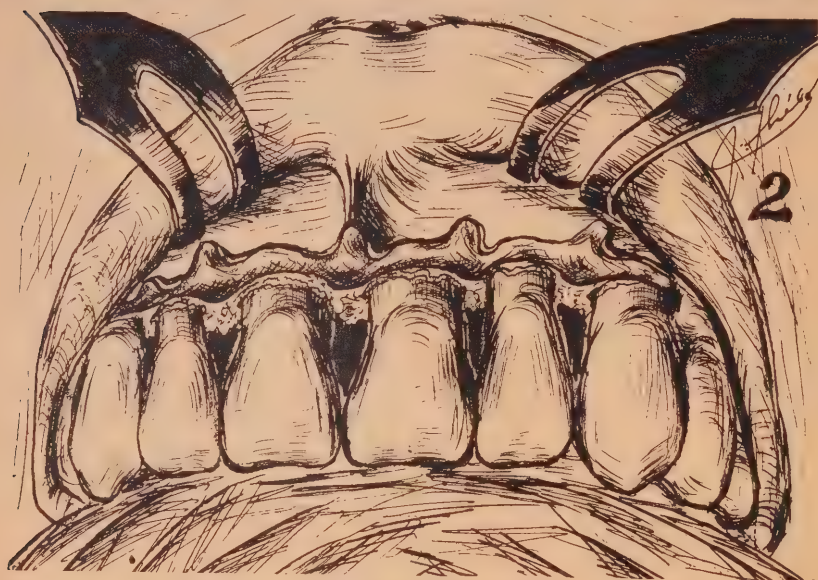
Cette déficience est journellement démontrée par le fait que certains mouvements opératoires, pour des raisons de commodité, sont exécutés à l'aide d'instruments servant à la dentisterie opératoire et à la chirurgie bucco-maxillaire. Il n'est même pas nécessaire de risquer ici une comparaison, car, les instruments

utilisés en dentisterie opératoire pour la préparation des cavités sont maintenant complets, variés, efficaces et standardisés. Il en est de même pour une des techniques de l'exodontie, limitée exclusivement à l'extraction des dents incluses; la pratique de cette spécialité est pourvue d'un matériel complet, à en juger par le nombre et l'efficacité des ossisecteurs, des exoleviers, des rongeurs, des gouges et par l'introduction récente du maillet automatique.

Les méthodes en orthodontie, à peu près contemporaines des deux techniques chirurgicales susmentionnées se sont

les catalogues, on y remarque plus de 50 paires de curettes, d'excavateurs, de ciseaux, de houes, de hachettes etc. Tandis que pour la périodontie opératoire, la méthode chirurgicale qui est considérée comme l'une des principales thérapeutiques relevant d'une chirurgie minutieuse, comme celle des yeux ou du nez, le nombre des instruments est insuffisant et incomplet, comme il va être démontré plus loin.

De la phase du diagnostic jusqu'à la dernière, qui est celle de la suture, le traitement chirurgical entraîne nécessairement la manipulation des fines papilles gingivales, celle du bord délicat de



Curetage radical modifié

rapidement simplifiées et synthétisées, grâce à l'application de moyens mécaniques qui sont aussi nombreux qu'expéditifs.

Comme peuvent attester les catalogues qui décrivent les divers instruments utilisés en dentisterie opératoire, cette branche de la chirurgie dentaire doit tout le progrès qu'elle a subi au perfectionnement d'un riche outillage. Dans

l'alvéole et de la mince couche du ciment et des autres éléments du paradentium.

Le degré d'efficacité des instruments prime naturellement sur la quantité, puisque nous désirons simplifier et perfectionner nos techniques.

Ces remarques sont opportunes, au moment où toutes les thérapeutiques de la pyorrhée alvéolaire sont à la veille d'être mises à la portée des étudiants en

chirurgie dentaire; car, bien que l'ère de la spécialisation prend une forme plus concrète de nos jours, la tendance actuelle est d'enseigner les grandes lignes des spécialités, même à ceux-là qui ne se destinent pas à la pratique générale.

Si le matériel chirurgical en périodontie n'a pas atteint un stade plus avancé, c'est parce que les praticiens, qui se cantonnent dans les frontières de cette branche de la chirurgie dentaire, ne contribuent pas assez à l'alignement de meilleurs procédés, susceptibles d'améliorer la manipulation des tissus gingivaux.

A l'appui de cette opinion, nous nous référons au perfectionnement apporté à la phase post-opératoire de la gingivectomie, dans laquelle l'application des ciments antiseptiques ou "packs" dans les interstices dentaires, assurent la stabilité et la protection des tissus opérés, à un point tel, que le stade de guérison peut atteindre maintenant une amélioration dans une proportion de 50%, à peu près. Tandis qu'après le curetage radical, les risques de complication par l'infection sont tellement élevés que cette technique, malgré tous les avantages qu'elle comporte, tend à être délaissée. Ceci résulte du fait que la suture des deux parties de la gencive, remises en place, ne sont pas suffisamment conditionnées, à cause du manque d'instruments appropriés et des détails techniques se rapportant au matériel à suture.

Avant de considérer brièvement dans l'ordre chronologique l'invention, la fabrication et l'utilisation des principaux instruments par groupe en périodontie clinique, il y a lieu d'excepter toute la série des racloirs ou "scalers", utilisés dans la phase préparatoire du détartrage et du polissage des dents, que Black et d'autres opérateurs éminents nous ont laissés.

Tout au début, dans la pratique exclusive du traitement chirurgical, les bistouris et les curettes employés constituaient le principal matériel de base, et ici, il est à noter que ces curettes, qui étaient empruntées à la dentisterie opératoire, ne seront modifiées d'une façon

adéquate qu'à la période des Neuman et des Zentler, pour prendre des lignes plus pratiques et plus définitives avec McCall et d'autres.

Ensuite, les séparateurs spéciaux pour la muqueuse gingivale ou "périotéotomes" ont été livrés à la profession, suivis plus tard par la présentation de la lime cémentaire.

Un peu plus tard, avec Sanders, Kaplan et d'autres, apparaît l'usage des limes en forme de scie, pour le raclage des bords alvéolaires et des autres tissus péri-dentaires.

Nécessité d'un matériel chirurgical plus complet et plus varié.

La technologie moderne recommande de mettre au service de toutes les sciences et de tous les arts, des procédés mécaniques et des moyens matériels les plus perfectionnés. Dans cet ordre d'idées, l'équipement, l'outillage et les instruments doivent être non seulement en rapport avec le degré d'avancement des connaissances humaines, mais elles doivent simplifier les techniques entachées de complexité, dès leur période initiale, en minimisant l'effort humain et le facteur temps, avec un maximum d'aisance et de facilité.

On pourrait se demander à quelle phase serait encore la science de l'Optique et l'art de l'Optométrie, si l'outillage dont ils disposent aujourd'hui n'était pas créé. Et on peut aisément comprendre jusqu'à quel point la chirurgie orthopédique serait encore à l'âge de l'enfance, si ces moyens étaient inopérants par faute d'un outillage abondant. En raison de la topographie des maxillaires, des courbes anatomiques des arcades et du plan d'orientation des dents, il est nécessaire que des instruments rectilignes, qui sont d'application difficile dans la région postérieure de la bouche soient présentés sous une forme plus commode.

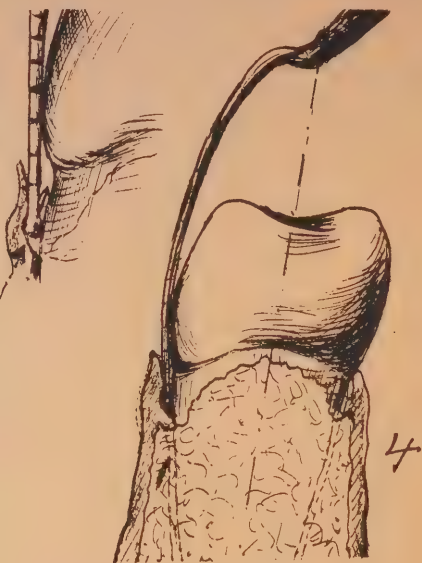
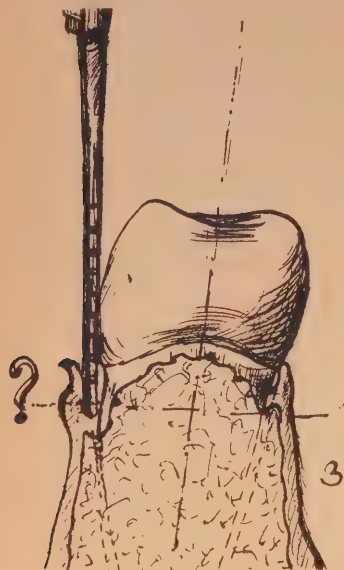
A ce titre, les instruments présentés en double (par paire ou couple) droit et gauche, répondent parfaitement à nos besoins. Nous ne pouvons que souhaiter la vulgarisation de leur emploi dans la pratique de la périodontie opératoire.

Commodité des instruments présentés en double

A l'appui de notre opinion exprimée au sujet des instruments, qui devraient être présentés, le plus souvent en double

la visibilité est souvent gênée par le manche de l'instrument.

La paire de sondes Nos 1 et 2, (Fig. 1) dont la courbure permet leur application sur la face convexe des couronnes, à droite



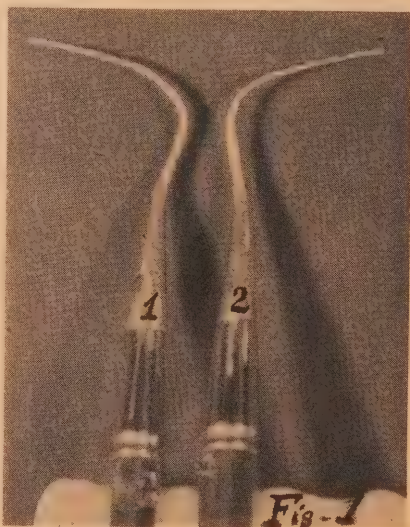
(droit et gauche), pour plus de commodité, nous prenons l'occasion de signaler ici les avantages que présente, par exemple, une paire de sondes exploratrices pour repérer la profondeur des culs-de-sac pyorrhéiques, sur l'emploi de l'unique sonde exploratrice droite, qu'on trouve chez les fournisseurs.

ou à gauche, tout en les plaçant dans l'axe d'implantation des dents, permet une

Cette sonde ne s'adapte pas assez facilement dans toutes les régions des deux maxillaires, sous la muqueuse et dans les clapiers, à cause du peu d'adaptabilité de son plan rectiligne avec la convexité de la couronne des dents:

1°) En l'appliquant dans le sillon gingival et en suivant l'axe d'implantation des dents, elle distend et lacère parfois la muqueuse. (Dessin 3.)

2°) En raison de la courbure des arcades et de la position constante de l'opérateur, placé un peu à droite du patient, la lecture des mesures inscrites en millimètres sur la sonde n'est pas aisée;



lecture plus rapide sans décollement accentué de la muqueuse. (Dessin 4.)

Les instruments, dont on se sert en dentisterie opératoire, ont l'avantage indiscutable d'être présentés en double, et c'est ce qui caractérise leur degré d'efficacité. Nous avons pensé qu'il était mieux d'adopter le même procédé en périodontie clinique.

Aussi, la fabrication des instruments

présentés dans cette étude se trouve basée sur le même principe.

Si l'instrument No 1 s'adapte, par exemple, au côté droit externe du maxillaire supérieur et le No 2 au côté gauche, la formule suivante résume de quelle manière se fait ordinairement l'emploi des instruments présentés par paire. Leur application se fera inversement pour le maxillaire inférieur:

Droit

Instrument No 1

8. 7. 6. 5. 4. 3. 2. 1.

8. 7. 6. 5. 4. 3. 2. 1.

Instrument No 2

Gauche

Instrument No 2

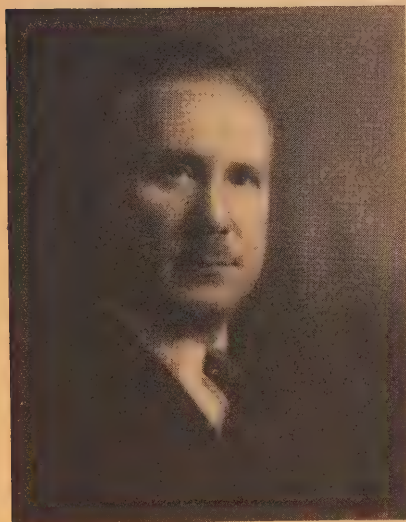
1. 2. 3. 4. 5. 6. 7. 8.

1. 2. 3. 4. 5. 6. 7. 8.

Instrument No 1

(à suivre)

CHEZ NOUS ET AILLEURS



M. le docteur Albert Surprenant, qui vient d'être élu président du Collège des Chirurgiens-Dentistes de la Province de Québec

Collège des Chirurgiens-Dentistes de la P. de Qué.

Les élections tenues parmi les gouverneurs pour la constitution des divers comités du Collège ont donné les résultats suivants:

Conseil exécutif:

Président: Albert Surprenant; 1er Vice-président: Ephrem Vinet; 2e Vice-président: J. Kenneth Carver; Régistrateur: Denis Forest; Président sortant de charge: D. P. Mowry; Conseillers: Conrad Archambault, G. G. Armitage, Ernest Charron, M. L. Donigan, J. Armand Fortier, Gustave Ratté, R. Trudel.

Conseil de discipline:

Président: G. G. Armitage; Conseillers: Conrad Archambault, et J. Armand Fortier.

Comité de consultation:

Ernest Charron et D. P. Mowry.

Comité de répression de pratique illégale:

Président: Jacques Demers; Commissaires: P. A. Boisvert, C. A. Contant, Claude de Grandmont, Victorien Dubé, Yves Lafleur, M. Lafontaine, Gustave Ratté.

Association Dentaire Canadienne:

Représentants officiels: J. Kenneth Carver et Gustave Ratté; substituts: Yves Lafleur et C. Aberdeen McCabe.

Commission des Examineurs:

Président: Ephrem Vinet; Commissaires: G. G. Armitage; C. A. Contant, Maurice Gosselin, Yves Lafleur, O. A. Lefebvre, Valmore H. Oliver, Viger Plamondon, Gustave Ratté.

Comité de législation:

Président: Conrad Archambault; Commissaires: G. G. Armitage, C. A. Contant, Claude de Grandmont, Jacques Demers, J. Armand Fortier, Gabriel Lord, Gustave Ratté, R. Trudel.

Comité de législation sur l'assurance-santé:

Président: C. Aberdeen McCabe; Commissaires: J. Kenneth Carver, Ernest Charron, J. Armand Fortier, A. L. Walsh.

Démission du docteur Armand Fortier

Le docteur Armand Fortier vient de démissionner comme vice-président de l'Association Dentaire Canadienne. Des raisons de santé forcent le docteur Fortier à délaissier ses fonctions dans les différentes organisations de la profession dentaire pour ne s'occuper que de son cabinet.

C'est avec regret que tous ont appris cette nouvelle et espèrent que le docteur Fortier pourra reprendre ses activités plus tard.

Don de la Société Dentaire de Montréal à la Commission d'Hygiène

La Société Dentaire de Montréal, à sa séance de septembre 1946, a présenté à la Commission d'Hygiène Dentaire de la Province de Québec un chèque de cent dollars pour aider celle-ci à défrayer les dépenses de sa campagne d'hygiène auprès du public. Ce montant a été reçu, au nom de la Commission, par le docteur Gabriel Lord, son président.

Inscription nombreuse à l'Université de Montréal

Au delà de cent vingt-cinq demandes d'inscriptions ont été reçues à la faculté de Chirurgie Dentaire de l'Université de Montréal, par des étudiants désirant étudier la chirurgie dentaire. De ce nombre, soixante élèves ont été acceptés. L'espace ne permet pas de recevoir plus d'aspirants en première année.

Démission du Commandant du Corps Dentaire

Le colonel D. S. Coons, qui avait remplacé le Brigadier L. H. Lott à la tête du Corps Dentaire Canadien, vient de faire parvenir sa démission aux quartiers généraux. Le Colonel Coons reprendra sa pratique civile à Hamilton. Il est remplacé par le Colonel E. M. Wansbrough.

Le Docteur René Rochon, Nommé Doyen

M. le docteur René Rochon, autrefois de Montréal, vient d'être nommé doyen de l'Ecole Dentaire de l'Université de Détroit. Le docteur Rochon, directeur des cliniques et professeur de dentisterie clinique était attaché à cette faculté depuis 10 ans. Il succède au docteur Tony Cadarette et devient le quatrième doyen de cette Ecole, qui fût fondée en 1932.

Premier titulaire du prix "Mémorial du docteur Théo. Côté"

Le premier titulaire du prix, "Mémorial du docteur Théo Côté", décerné à l'élève finissant, premier en Couronnes et Ponts, à la faculté de Chirurgie Dentaire de l'Université de Montréal, est le docteur Jean-Paul Ouellette de Montréal. On sait que ce prix est constitué par les intérêts annuels d'une somme souscrite par les anciens élèves du docteur Côté, pour perpétuer sa mémoire.

Nécrologie

Le docteur Isaïe Clairoux est décédé subitement à Montréal, le 2 septembre. Le docteur Clairoux avait terminé ses études à l'Université de Montréal, en 1924 et avait exercé sa profession en grande partie dans la région de St-Henri de Montréal. Nos sympathies à la famille.



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LA SOCIÉTÉ DENTAIRE DE MONTRÉAL

par: JACQUES DEMERS, Président

Le nouveau Conseil de la Société Dentaire de Montréal a élaboré, avec le plus grand soin possible, un programme qui, nous espérons, saura non seulement intéresser nos membres, mais les aider à se perfectionner et à se tenir au courant des progrès de la profession.

Une fois par mois, nous aurons une conférence traitant spécialement d'une question particulière de l'Art Dentaire. La série de conférences comprend des sujets différents, de sorte qu'une nouvelle question sera traitée à chaque conférence. Nous ne doutons pas que les membres de la Société Dentaire se feront un devoir de suivre assidument ces conférences et que l'idée de ces conférences justifiera chez plusieurs leur adhésion future à la Société.

De nos jours, nul ne peut réussir s'il reste toujours au point de départ; chacun doit augmenter ses connaissances à un rythme parallèle au progrès de la science et doit avoir en même temps à coeur d'être au courant de tous les nouveaux développements. Le but de nos conférences est justement d'enseigner à nos membres ce qu'il peut y avoir de nouveau dans la pratique de la profession, en un mot, les mettre au courant des méthodes modernes. Tous peuvent en tirer un énorme profit.

Les conférences permettent aux membres de se tenir ainsi au courant, sans avoir à quitter leur bureau plus qu'il ne le faut, et sans abandonner leur clientèle pendant de longues périodes.

Nous avons fait un choix d'éminents conférenciers pour les études de cette année. Ils sont à la hauteur de la tâche qui leur est assignée.

Les membres en règle avec notre Société profitent de plusieurs autres avantages et j'en voudrais souligner un ici, en particulier, celui de l'assurance-

groupe contre la maladie. En effet, nous avons fait des arrangements pour que nos membres puissent participer aux avantages de cette assurance-groupe. Ceci nous a ouvert la porte pour de nouveaux pourparlers, afin que nos membres puissent profiter, dans un avenir rapproché, d'avantages supplémentaires, qui peuvent exister sous des contrats de même espèce.

Nous invitons donc les dentistes de Montréal à rentrer dans les rangs de la Société Dentaire et de suivre assidument ses activités.

LES DENTS SE CARIENT-ELLES PLUS EN HIVER OU EN ÉTÉ?

La proportion de sels de calcium et de phosphore, contenue dans la salive, varie-t-elle avec les différentes saisons de l'année? En un mot, la carie dentaire se développe-t-elle plus rapidement en été qu'en hiver?—Les docteurs W. W. Wainwright, D.D.S., M.S. et H. Becks, M.D., D.D.S., dans le Journal of Dental Research (août 1946) présentent le résultat de recherches entreprises dans cette direction. Voilà les conclusions de leur rapport: "Des analyses individuelles de la salive de 650 personnes différentes furent accumulées durant une période de trois ans, coordonnées en rapport avec le mois du prélèvement et étudiées en vue de trouver un facteur variant avec les saisons. Les résultats ne montrèrent aucune influence saisonnière sur la proportion de sels de calcium et de phosphore contenus dans la salive."

COURS DE PERFECTIONNEMENT

Faculté de Chirurgie Dentaire

UNIVERSITÉ DE MONTRÉAL

Des cours de perfectionnement, dans différents domaines de la chirurgie dentaire, sont offerts aux membres de la profession par le personnel enseignant de la Faculté.

Cours	Durée	Dates	Honoraires
Chirurgie et anesthésie.....	5½ jrs	25-30 nov.	\$25.00
Traitement de canaux.....	5½ jrs	11-16 nov. 20-25 jan.	\$30.00
Prothèse complète.....	9 jrs	18-27 nov. 20-29 jan.	\$50.00
Orthodontie.....	14 jrs	18-29 nov.	\$40.00

Comme le nombre d'inscriptions est, dans la plupart des cours, limité à 10, on demande à ceux, qui veulent les suivre, de s'inscrire le plus tôt possible. S'adresser au docteur Ernest Charron, doyen, Faculté de Chirurgie Dentaire, Université de Montréal, 2900 Boul. Mont-Royal, Montréal.

Texte de l'Allocution prononcée par le docteur Gabriel Lord à la Réunion de la Société Dentaire* de Montréal

Je tiens, dès mes premiers mots, à vous remercier très vivement, très sincèrement, du geste, si précieux et réconfortant pour moi, que vous venez d'accomplir en me remettant généreusement un chèque de cent dollars pour la Ligue d'Hygiène Dentaire de la Province de Québec, Inc.

Oui, merci beaucoup.

Notre Ligue, pour poursuivre sa tâche et la mener à bien, a besoin, en effet, de revenus et, si modestes doivent-ils être, ils connaissent cependant un minimum indispensable — jusqu'ici difficile à atteindre. C'est vous dire que votre générosité nous rend service et que votre chèque sera on ne peut mieux accueilli par notre Trésorier, notre bon ami le Docteur Ephrem Vinet.

Laissez-moi également vous dire qu'il m'est infiniment agréable de recevoir votre contribution bénévole parce que, je vous le déclare en toute franchise, je trouve qu'elle est logique et que vous êtes vous-mêmes les premiers intéressés à la faire. Comprenez-moi bien: vous êtes intéressés à la faire—parce que j'estime que vous êtes tous extrêmement intéressés à ce que notre Ligue vive et accomplisse la besogne qu'elle a volontairement assumée.

Quel but, en effet, la Ligue d'Hygiène Dentaire vise-t-elle principalement? Faire, avant tout, l'éducation du public, en général, de la jeunesse, en particulier, pour que nul—ce sera l'idéal—n'ignore plus, d'ici quelques années, qu'une bonne dentition joue, dans l'économie harmonieusement équilibrée du corps humain, donc dans la santé, un rôle de premier plan. Et nous nous efforçons d'apprendre à qui nous lit, à qui nous écoute, à qui nous interroge, qu'une bonne santé dentaire, neuf fois sur dix, peut se maintenir, se rétablir, être acquise, grâce aux soins

réguliers donnés aux dents par le dentiste.

Et nous insistons d'une façon toute spéciale, d'une manière constante, incessante, sur cette absolue nécessité des visites régulièrement périodiques au dentiste. Nous voulons, avant toute autre chose, faire bien pénétrer dans l'esprit de nos lecteurs, de nos auditeurs, de ceux à qui nous allons rendre visite, cette vérité première de l'hygiène dentaire—que les soins préventifs, ou, à tout le moins, que les soins hâtifs au cas d'un mal commençant, sont le secret d'une bonne dentition, d'une bonne santé dentaire, de dents solides et saines, belles et bonnes.

Et nous voulons, tout particulièrement, faire bénéficier de cette propagande que nous jugeons indispensable, les jeunes filles, les jeunes femmes, les mamans de demain, les jeunes mères elles-mêmes, afin qu'en étant bien convaincues, elles appliquent les règles essentielles que nous leur inculquons, à elles-mêmes, d'abord, à leurs enfants dès leur naissance ensuite — à ces mêmes enfants tout au long de leur jeunesse, de leur adolescence.

Et nous avons ainsi, non seulement l'espoir, mais, je ne vous le cache pas, la certitude de travailler de toutes nos forces pour le bien commun, pour l'intérêt général le mieux compris de notre population, pour la santé publique.

J'ajoute, en toute hâte, que nous avons la même certitude de servir aussi, et très efficacement, l'intérêt le meilleur, le plus immédiat, le plus réel, le plus tangible de la profession dentaire, votre intérêt, mes chers confrères et amis.

Et c'est pourquoi je vous disais tout à l'heure que votre contribution si généreuse de ce soir est un geste logique de votre part et qu'en vérité vous ne pouviez pas ne pas l'accomplir.

* Allocution prononcée par le président de la Commission d'Hygiène Dentaire de la Province de Québec, à la séance du 14 septembre 1946 de la Société Dentaire de Montréal, à l'occasion de la remise d'un chèque de cent dollars par la société à la Commission.

La tâche que nous poursuivons, la propagande que nous menons, l'éducation que nous dispensons, sont pour vous tous, que vous le sachiez déjà ou non, je vous l'affirme, des facteurs de prospérité. Nous soignons la santé publique, nous voulons participer à la lutte en faveur du mieux-être de tous les nôtres—mais nous garnissons aussi vos bureaux de patients sans cesse renouvelés.

Au jour, et il viendra si vous nous soutenez, où chacun sera convaincu, jeunes et moins jeunes, femmes et hommes, de l'impérieuse nécessité d'avoir de bonnes dents pour se bien porter, pour connaître le succès, pour posséder une bonne apparence, pour acquérir et conserver le bonheur—ce jour-là, mes chers amis, vos bureaux ne désempliront pas. Et la bataille que nous livrons avec tant d'intérêt, si j'osais, je dirais tant d'affection, dans les milieux écoliers, est peut-être la plus utile qui soit pour vous, tout autant que celle, non moins importante que nous poursuivons auprès des mères enceintes et des jeunes mamans. Par là, comprenez-le bien, nous vous assurons la clientèle de demain, nous vous préparons plusieurs générations de patients, qui se confieront à vous dès le plus jeune âge et qui prendront l'habitude, pour ne la perdre plus jamais, de vous visiter régulièrement.

Seuls, jadis, il y a bien longtemps, en un temps barbare complètement révolu, quand il en existait encore, quelques "arracheurs" de dents—espèce néfaste heureusement disparue—eussent pu se plaindre de notre action qui vise évidemment à combattre et à condamner les extractions, à lutter contre l'envahissement si lamentable des dents artificielles et des pièces de toutes sortes, totales ou partielles. Mais vous, pénétrés comme je sais que vous l'êtes, du rôle de guérisseur et de sauveur des dents, des vraies dents, des dents naturelles, vous devez tous, dans la proportion de 100%, être avec nous, à nos côtés, vous devez nous soutenir, nous aider, en quelque sorte veiller sur nous et développer sans cesse le rayonnement de nos activités.

Mon cher Président, mes chers confrères et amis, il y a trois ans, si j'ai bonne mémoire, notre excellent ami et confrère, Armand Fortier, alors Président de notre Collège, lors d'une visite à notre Société Dentaire que j'avais, à ce moment, l'honneur de présider, nous avait demandé de bien vouloir consacrer, au cours de chacune de nos réunions, très régulièrement, cinq minutes, chaque fois, à la discussion d'une question ou d'un problème d'hygiène dentaire. Je ne veux pas dire que nous ne l'ayons pas fait du tout, mais nous pouvons avouer que nous ne l'avons pas fait toujours. Reprenons donc ce soir cette bonne résolution et je m'engage, pour ma part, au nom de la Ligue d'Hygiène Dentaire de la Province de Québec, de vous fournir, si vous m'en exprimez le désir, et même à l'avance, des sujets de discussion. Ils ne manquent pas, je vous assure, et nous pourrions facilement leur consacrer cinq longues minutes, et bien plus même, si vous le voulez.

Encore merci, le plus sincèrement, de tout coeur, mes chers amis.

Activités de la Société Dentaire de Montréal

La réunion de septembre a présenté aux membres le docteur Jules Thébaud, qui a donné une conférence intitulée "La Périodontie et son Aspect Moderne". Le docteur Thébaud, ancien doyen de l'Ecole Dentaire de Port-au-Prince, Haïti, est un spécialiste dans le domaine de la paradentose, dont la réputation est bien établie dans les deux Amériques.

La séance du mois d'octobre fut consacrée à la chirurgie buccale et le docteur James Franklin présenta un travail illustré sur "Le Traitement des Fractures des Maxillaires".

Une assistance nombreuse répondit à l'invitation des dirigeants de la Société, à l'occasion de ces deux séances.

The Light of Bethlehem



Above a world entrapped by fear,
 There shone a silver star.
The doubters saw it not, nor cared;
 The men of faith, from far,
Knew that the Light of Love looked down
And followed it through field and town.

Through desert lands they made their way
 Past mountains bleak and wild;
They came to humble Bethlehem
 And found a little Child.
Their hearts were stirred: their feet had trod
A road to peace—they learned of God!

How blind are we who walk through night
 In desert lands of sin!
Our ears are deaf: we cannot hear,
 Amid the strife and din,
The voice of One who came to tell
The Word of Truth—that all is well.

Our hearts are broken by the years,
 But still there shines a star
Above a little manger-home.
 Oh, that we might, from far,
Retrace our steps through fear and night
To faith and hope, and Bethl'hem's light!

—Thomas Curtis Clark



JOHN F. EDGECOMBE, D.D.S. O.B.E., E.D.
Saint John, New Brunswick

Editor for New Brunswick of the Journal of the Canadian Dental Association.

Enlisted Sept. '16, Overseas Field Art. 43rd. Bty. in First War.

Graduate of University of Toronto in unique Class of 1923.

Past President of Saint John Dental Society and New Brunswick Dental Society.

District Dental Officer of M.D. No. 7 in Nov. '39.

Posted to No. 3 Dental Coy. 3-Sept.-'40.

Overseas June 1941.

Asst/Director Dental Services First Cdn. Army 1-May-'42.

Asst/Director Dental Services First Cdn. Corps (Italy) 15-Oct.-'43.

Asst/Director Dental Services Cdn. Section 21 Army Group April '44.

Deputy Director Dental Services at Cdn. Mil, H.Q., London, Aug. '45.

Returned to Canada Dec. '45. Retired March '46,

and now in civilian practice.

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RECENT ADVANCES IN CANCER RESEARCH WITH SPECIAL REFERENCE TO CANCER OF THE MOUTH*

by WILLIAM BOYD, M.D., F.R.C.P. (Lond.), Toronto, Ontario

IT IS often presumed by the public that medical science has made no progress in the task of elucidating the nature and cause of cancer. Nothing could be further from the truth. We now know that malignancy is essentially a property of automatic division, a fundamental change in cell physiology, which develops suddenly, is transmitted to descendants, and bears no apparent relation to the agent which starts it. In these respects it is entirely different from an infective process, the obvious manifestations of which are inflammation and necrosis. Cancer is fundamentally a disturbance in cell growth. We may speak of the mystery of cancer, but we must remember also the mystery of growth, for the ultimate cause of cell growth is still undiscovered and will probably remain so.

As to the cause of cancer, the real stumbling block is that too many causes have been discovered, not too few. I refer, of course, to the causes of experimental cancer, although some of the causes of human cancer are also known. If we regard cancer as a single disease, like tuberculosis, the multiplicity of causes is very confusing, but if it be considered as a group of conditions, like the group of infectious fevers, the riddle becomes less insoluble. Or again, it may be taken as

a single process which may be started in divers ways, just as fire may be started by a match, by an electric current, or by a chemical reaction.

The first forward step was made by Sir Percival Pott in 1775 when he observed that cancer of the skin was common amongst tar workers. After a prolonged latent period of 140 years the second step was made in 1915 by Yamagiwa who produced cancer in the experimental animal by tarring the skin every day for a prolonged period. The third step was taken in 1932 by Kennaway and Cook who isolated the hydrocarbon 1:2 benzpyrene from tar and showed that it was highly carcinogenic. It is not generally realized that benzpyrene is the only carcinogen which has been isolated directly from tar. An acute observer noticed, however, that 1:2 benzpyrene gave a spectrum with fluorescent light very similar to that of a group of recently synthesized hydrocarbons, and when these were tested on animal tissue they were found to be even more actively carcinogenic than benzpyrene. The experimentalist had now a whole array of chemical agents by means of which he could induce cancer in a suitable animal. How unlike this is from such diseases as tuberculosis or syphilis, and how remarkably confusing.

*Presented at the National Convention of Canadian Dentists, Toronto, May 28, 1946

The fact that cancer can be produced by the action of synthetic hydrocarbons is of great interest to the scientist, but is not particularly exciting to the clinician. Soon, however, it was discovered that members of the cholanthrene group were carcinogenic. These contained cholic acid, a substance occurring naturally in the body. This introduced a new possibility, namely, that carcinogens may be produced within the body as the result of disorders of metabolism.

HORMONES AND HEREDITY

About this time it became apparent that the basic chemical structure of the carcinogenic hydrocarbons was very similar to that of the sex hormones, and it is now known that these hormones can produce cancer in the experimental animal. Clinical observations have shown the importance of sex hormones in cancer of the breast in woman and cancer of the prostate in man. Cancer of these organs, so common and so destructive, could be prevented by removal of the ovaries and testicles in infancy, but this, perhaps, would be carrying prevention too far.

Mention of the hormones introduces another consideration, namely that of heredity. Repeated injections of oestrin in young mice result in carcinoma, but only if the mice belong to a cancer strain. If they are cancer-resistant, no amount of oestrin will produce carcinoma. Two factors are therefore needed, one constitutional and the other an exciting factor which may be either exogenous or endogenous produced within the body.

This is a concept of basic importance, but here again complications have arisen, as appears to happen at every turn in the complex task of cancer investigation. One thinks of a hereditary predisposition to a disease as something with an essentially genetic basis, something dependent on some peculiarity of the genes or chromosomes and thus transmitted from parent to offspring. But the work of Bittner has given a rude shock to this

reasonable hypothesis. Bittner demonstrated the startling fact that when newly born mice of a high mammary cancer strain are suckled by mice of a cancer-resistant strain they no longer manifest a marked tendency to develop cancer of the breast. The only conclusion which can be drawn is that there is something in the milk which is responsible for the development of the mammary cancer. With commendable conservatism Bittner termed this something merely the milk factor or influence, but there can now be little doubt that it is a virus. In this particular instance, therefore, a filterable virus appears to enter the body, to dwell there unobtrusively for a long period, and in the fullness of time, possibly in association with some other factor such as oestrin stimulation, to produce mammary cancer.

CARCINOGENIC VIRUS

The concept of a carcinogenic virus is by no means new. In 1910 Peyton Rous showed that the cell-free filtrate of a fowl sarcoma would reproduce the disease when injected into other fowls of the same breed. Here again Rous spoke merely of an agent, but it is universally agreed that this agent is a true filterable virus. Other examples of so-called filterable tumours have been discovered in birds, amphibia and mammals. In recent years Shope has demonstrated that a benign papilloma of the skin in the wild cottontail rabbit belongs to the filterable group, and is therefore presumably viral in origin. This virus when injected into the domestic rabbit produces a skin papilloma, which frequently becomes malignant. It is of particular interest to note that when this occurs the virus can no longer be separated from the tumour. The virus has become masked, but its continued presence can be shown by the demonstration of antibodies in the blood. This suggests a possible explanation of why it has not been possible to obtain viruses from mammalian cancer. If viruses from malignant tumours were

readily transmissible it might well be supposed that most vertebrates would have perished long ago. Bacteria invade tissue spaces and the blood stream, so that they are exposed to antibodies and phagocytes and can be attacked by chemotherapy. A virus, on the other hand, dwells safely within cells by which it is protected from these agencies. It is only set free if it destroys the cells, and the cancer virus knows better than to do that.

Viruses may be incapable of inducing disease unaided, and may require a preparatory factor. Thus when vaccine virus is injected intravenously in the rabbit it produces no effect unless the skin is first damaged. Even plucking out a few hairs may be sufficient, for this results in mitosis, and the virus can penetrate the walls of dividing cells.

These remarks must not be taken to indicate a belief that the one and only cause of cancer is a virus or viruses. It must be admitted, however, that certain malignant tumors in animals are due to viruses, and it is possible that in man the presence of an indwelling virus may be one factor in the aetiological chain.

NEGATIVE FACTORS

So far we have been discussing what may be called positive aetiological factors, something which when added to a tissue lights the fire which results in neoplasia. It is now known that a negative factor, a deficiency in some food factor, may also play a part of importance. A few years ago Japanese workers showed that primary cancer of the liver could be induced with great regularity in mice and rats by adding to the food a dye known as butter yellow. European and American workers failed to confirm these results. The reason for this was found to lie in the diet. The Japanese animals were fed on rice and a small amount of carrot, whereas the European and American animals were fed largely on wheaten cereals. When the lat-

ter animals were fed on the Japanese diet, the butter yellow produced cancer of the liver. It was later found that the protective factors in the diet were casein and riboflavin, the latter, of course, being a member of the vitamin B complex. Here, then, is a clear-cut instance of a dietary deficiency acting as a predisposing factor in the production of cancer.

Another example, this time human and less conclusive, is carcinoma of the hypopharynx, which is often preceded by dysphagia for a long period. The explanation appears to be that the development of the tumour is preceded by a dry atrophy of the pharyngeal mucosa which is dependent on a dietary iron-deficiency, and which is responsible for the dysphagia. Evidently this mucosal change is precancerous in nature, and it can be relieved and hypopharyngeal cancer prevented by the administration of iron.

CANCER OF THE MOUTH

It is far from easy to apply these complex considerations to the problem of cancer of the mouth in man, but they may at least provide a background for our thinking. This discussion will be confined to carcinoma, which may arise in the buccal mucous membrane, the tongue, or the lip.

Positive factors are frequently in evidence. The mucosa may be irritated by a broken tooth or a poorly fitting dental plate. Cancer of the lip is peculiarly common in certain fishing communities in the west of Scotland, an incidence which may be explained by the fact that the men hold between their lips the tarred twine used for mending the fishing nets. In persons who chew a tobacco quid or betel nut, cancer of the mouth may develop at the site where the quid or nut is habitually held. In the coastal districts of Southern India cancer of the mouth is far commoner than cancer in all other situations put together. In a hospital of only 200 beds Somervell saw 4853 cases of oral cancer in a period of 20 years. The poor are the

principal sufferers, for they keep the betel nut in the mouth all night for reasons of economy. Of itself the betel appears to be harmless, but it is commonly combined with tobacco. Only two types of tobacco leaf are carcinogenic, and these are grown locally; the other varieties are not dangerous.

Many other varieties of positive factors are familiar to you which may either precipitate cancer of the mouth, or may predispose to its development. The association of syphilis of the tongue and carcinoma is firmly established. This is the only example known to me where the spirochaeta pallida plays a part in carcinogenesis. That leucoplakia of the mouth may be a precancerous condition is common knowledge.

The significance of negative factors in cancer of the mouth is beginning to be recognized. The incidence of the disease bears a direct relationship to economic status. In this respect it belongs to the group known as social cancer. It has been shown in England that if the male population is divided into 5 social classes, cancer of the upper digestive tract from mouth to pylorus is highest in the lowest social class and falls with a regular diminution to reach the lowest incidence in the highest social class. In the case of the lower digestive tract there is no relation of cancer incidence to social status. Undoubtedly one of the factors responsible for the relationship of mouth cancer to economic status is dietary deficiency and in

particular avitaminosis B. Under such conditions there may be inflammatory, degenerative and atrophic lesions of the mucous membrane of the mouth and tongue. The tongue becomes tender and glossy, there is inflammatory hyperaemia and even ulceration of the buccal mucous membrane, and leucoplakia is common. The saliva is decreased in amount and becomes more viscid. Rather similar lesions, particularly angular fissures of the mouth and superficial glossitis, may be oral manifestations of iron deficiency and are not necessarily due to avitaminosis. These lesions, especially leucoplakia, are frequently precancerous. Degenerative mucous membrane changes are found in the majority of cases of mouth cancer. The deficiency is often aggravated by restriction in diet resulting from the painful oral lesions.

From this consideration of the positive and negative factors concerned in the pathogenesis of cancer of the mouth it becomes evident that this form of malignant disease is to a peculiar degree susceptible of prevention. This is particularly true of the precancerous lesions which may be revealed to the eye of the dentist much earlier than to the eye of the physician. This paper can hardly be called informative or even edifying, but it may at least have suggested to you that more is known about the aetiology and pathogenesis of malignant disease, including that of the mouth, than is commonly believed.

A good listener is not only popular everywhere, but after a while he knows something.—Wilson Mizner.

What promises to be one of the most valuable uses of penicillin is its power of rendering the blood stream hostile to a bacterial shower. When a tooth has to be removed for the relief of an acute alveolar abscess, it is a great comfort to know that an injection of 50,000 to 100,000 units of penicillin into the buttock ten minutes before the operation will closely control any spread of infection in so far as the infection is penicillin-sensitive. Particularly is this property of penicillin valuable when any dental interference is called for in a child or an adult with simple noninfective endocarditis.—E. Wilfred Fish, M.D., D.D.Sc., D.Sc., in Jour. A.D.A. Aug. 1946.

DENTAL CARE OF DISPLACED PERSONS*

by DR. A. B. SUTHERLAND†

WHEN I arrived in Germany late in November 1945, I had little idea of the size and scope of the work which the United Nations Relief and Rehabilitation Administration was carrying out in its displaced persons operation. There were half a million displaced persons in the British Occupied Zone alone, concentrated in about 200 assembly centres. The latter, I found, were groups of camps housing anywhere between 500 and 30,000 DPs. The camps themselves were a little harder to define. Some consisted of simple barracks of Nissen huts in which the DPs were lodged in military fashion; other "camps" were apartment houses, office buildings, or groups of individual private homes taken over from the Germans. An assembly centre was the administrative unit and might include any number or variety of camps, not always necessarily in the same town.

UNRRA's responsibilities with regard to displaced persons in the British Zone were carefully defined in an agreement with the British Army and Control Commission for Germany (British Element) signed on November 27, 1945. This agreement provided that UNRRA should administer the displaced persons assembly centres and provide all welfare and medical services for their populations. The admission of displaced persons to assembly centres and their repatriation therefrom, however, remained the responsibility of the Army and C.C.G.

UNRRA teams in charge of assembly centres were composed, roughly, of the following personnel: director, deputy director, medical officer, nurse, principal welfare officer, assistant welfare officer, supply officer, warehouse officer, messing officer, admin-

istrative assistant and drivers. A group of eight to twelve assembly centre teams was controlled by a field supervisory office, which in turn was responsible to one of the three District Headquarters, located close to the headquarters of the 1st, 8th or 30th Army Corps occupying the British Zone. The UNRRA Zone Director, Sir Raphael Cilento, maintained his staff at the village of Spenge, strategically situated near both C.C.G. and British Army on the Rhine Headquarters.

Upon my appointment as Chief Dental Officer for UNRRA in the British Zone, I found that the agreement signed on November 27 made no specific provision for the dental care of the displaced persons, although it did provide for medical treatment in general. However, on December 21, 1945, after a number of preliminary conferences, it became possible to have a directive issued by the Public Health Branch of the Internal Affairs and Communications Division of C.C.G., which stated in part: "Medical care for displaced persons, as defined in the above mentioned agreement made with UNRRA, will include the provision of essential dental treatment. Essential dental treatment will include: extractions, insertions of permanent fillings, treatment of diseases of the mouth, and replacement of teeth. Replacement of teeth will be limited to edentulous cases and those partial cases for which an UNRRA medical officer certifies replacement to be necessary to physical recovery."

There were no dental officers assigned to UNRRA teams, field supervisory offices, or district headquarters. The plan was that dental treatment would be supplied by dentists recruited from among the displaced

* Approved by United Nations Relief and Rehabilitation Administration, Washington 25, D.C.

† Dr. Sutherland is a member of the C.D.A. and practised in Toronto before joining the Dental Corps and later the UNRRA.

persons themselves. Some of these were already working in a number of assembly centres, under the supervision of the local UNRRA medical officer.

My first and most immediate problem became the procurement of supplies with which these men might work. Up to the time of my arrival, emphasis had been laid on securing medical supplies more urgently needed, and dental equipment had had to take lower priority. The lack of equipment and supplies was seriously hindering those dentists who had already volunteered to work and who were making a valiant effort to provide their people with some measure of treatment and relief. A few of the UNRRA teams had managed to gather together some basic equipment for their dentists, while other assembly centres had in their employment German civilian dentists, paid by the local burgomeister. Other large groups had arranged for the provision of some services by German dentists in their own offices, also paid by the burgomeister. In still other cases, there was no organized service, and the displaced persons were in the position of having to make whatever arrangements they could, including payment.

Generally speaking, throughout the British Zone, in places where dental centres were established, the basic or non-expendable supplies were fair, but consumables, in the case of some essential items, were non-existent, and, in general, quite scanty. The UNRRA personnel concerned complained that they were unable to secure any continuity of supply with regard to the expendable items. The source of some of the supplies obtained through the DP dentists themselves might best be described as mysterious. It was noted that, even had items been available through normal channels, some of the dentists employed were in no position to make intelligible indents for these. One request was seen which had

been sent by a DP dentist in his native tongue—Lithuanian—for material in amount sufficient to make 300 dentures.

The German dental industry before the war had a very considerable export market, and production was greatly in excess of local requirements. A survey made since the war shows that the industry has not suffered greatly from war damage, but that it is in very limited production because of the shortage of raw materials and coal.

I approached the Public Health Branch of the I.A. and C. Division, and found this body most cooperative. I was assured that every effort would be made to render the necessary materials available. Because of the limited production of the dental industry in Germany then, the only known quantity source of supply in the Zone was from captured enemy sources. At that time, the position was that the stock was in the control of the British Army on the Rhine, which held first priority demands, followed by the Wehrmacht (in accordance with the Hague Convention) displaced persons, and German civilians, in that order. However, the disbandment of the Wehrmacht was scheduled to be completed about January 20, and certain captured enemy materials, including dental supplies, were to be handed over from B.A.O.R. to C.C.G. control.

In answer to the question raised by the Public Health Branch as to what amount of material it was estimated that dental services for displaced persons would require, I was able to draw up a stores list giving the minimum requirements for one dental surgery, based on a general survey which I had managed to conduct in the meantime. I suggested that we be allowed to operate on a ratio of one dental surgery per 5,000 DPs. Although this ratio under normal conditions would be considered too low, I had to be governed in arriving

at the figure by the known scarcity of dental materials, and also by the knowledge that the ratio would improve with the anticipated repatriation of displaced persons.

Following this, on the suggestion of the Medical Supply Officer of C.G.G., I visited two large captured enemy dumps, one in Rendsburg and the other in Kiel, in the Schleswig-Holstein region, with a view to appraising the amount of material which might become available for DP purposes. Also it was desired to know which items might be expected to be in short supply. This visit was made late in January, while the handover of captured enemy supply drugs from B.A.O.R. to C.C.G. control was in progress, and a fair conception of the overall supply situation was gained.

On the basis of this survey, I was able to anticipate that three months' supply for the British Zone would be available from these two dumps alone. On January 31, such an amount was ready for immediate distribution to 30th Corps District, where the bulk of the displaced persons were then concentrated. The only shortages anticipated were artificial teeth, acrylic resin and tooth-brushes. Immediately, the C.C.G. began to search for supplies of the first two items while I endeavoured to secure toothbrushes through UNRRA and voluntary society sources.

Having made the basic arrangements for the procurement of supplies, my next step was to ensure their effective distribution. This was done rather easily through the medical officers working in the UNRRA field supervisory units. Each medical officer was requested to keep a close check on the requirements of the dentists in the teams under his supervision, and a system was devised whereby the medical officers might indent for the DP dentists upon the stocks now moved to the respective Military Government Medical Stores

in the three Corps Districts of the Zone.

It was only after the supply and distribution problems had been cleared up that I was able to devote my attention to the actual supervision of the dental care provided for the displaced persons. UNRRA medical officers were advised to instruct the DP dentists that it was desirable to provide priority dental treatment for children over other age groups, and that their treatment should be as comprehensive as facilities would allow. In places where dental centres were already established the following procedure was suggested. Commencing with children of pre-school age, group dental parades should be arranged with the dentists and, as far as facilities allowed, this should be continued with groups up to the age of 16 years. The dentist was asked to make a routine oral examination and to note, along with the child's name, the dental requirements of each. From this information, the UNRRA team nurse would make suitable appointments with the dentist, giving priority to the more needy cases. It was desired that treatment for children should be as comprehensive as possible under the circumstances, embracing the filling and prophylaxis of deciduous teeth as well as permanent teeth.

In order that the closest check might be kept on the work of the DP dentists, and on the supervisory functions of the team and field supervisory medical officers as well, a simple statistical reporting form was devised for the use of all personnel concerned in the dental operations. In this connection it is interesting to note some figures on services provided until the end of March 1945: patients attended, 111,956; prophylaxes, 55,092; extractions, 39,224; cement fillings, 28,492; silver amalgam fillings, 24,324; copper amalgam fillings, 1,588; silicate or porcelain fillings, 37,664; treatments of oral infections, 9,688; treatments,

post-operative, 2,496; x-rays, 1,824; complete dentures, 600; partial dentures, 1,804; and denture repairs, 652. It should be mentioned that a few of the dentists had been working on their own since August 1945, and that some had kept records of their services; these are included in the figures given above.

It was a source of great regret to me that I was unable to lend much attention to the clinical side of dentistry in Germany, for I feel sure that valuable information could have been gathered from the study of various groups, in view of their background of deficient and even starvation diets, in many cases, during the past few years. Some interesting comparisons might have been drawn between dental conditions among the German population on the one hand and among the various national groups of displaced persons on the other. In their treatment of subject peoples throughout the war, the Germans insisted on differentiating between the various national groups, providing better facilities and care for those whom they considered to be closer to their own "pure" race, like the Scandinavians, and progressing, on a downward scale, to the Poles and Jews, whom they considered to be the lowest specimens of humanity.

Unfortunately, however, time did not permit me to carry out any research along these lines except on a most superficial basis, and I do not feel qualified to present any conclusions. Regarding the dental condition of the displaced persons themselves, however, I can do no better than quote from a joint report submitted by six Baltic dentists (two Lithuanian, two Latvian and two Estonian) responsible for the treatment of displaced persons at the UNRRA assembly centre in Meerbeck, near Minden. This report is fairly representative of conditions in most of the UNRRA assembly centres which I had the opportunity to visit:

"Compared with analogous researches which were carried out in our native countries, we find dental conditions among the Baltic children now in Germany quite bad. The time of eruption for infants' teeth is delayed. Only an average of 2 per cent of the children between two and three years of age in our countries were found to have damaged teeth; here in Germany the figure is 5 per cent. Nearly 90 per cent of the children in the 3 to 6 group and almost 100 per cent of the children over 6 years of age have damaged teeth. The eruption of permanent teeth is also delayed, and these teeth are not sufficiently calcified.

"The reason for this situation is to be found firstly in the German occupation of the Baltic states, whereby the local populations received only approximately half the amount of food normally consumed by the German occupying officers. Secondly, circumstances in Germany during the war were extremely bad for displaced persons, as regards their food and conditions of life . . . food rations were very small and the want of butter, eggs, fresh vegetables, and fruit was great. Besides, it should be noted that the feeding of expectant mothers was insufficient, and this naturally affected the development of their children's teeth.

"Regarding the adults, the percentage of damaged teeth is also very high. Since the war ended, there have appeared numerous cases of mouth disease. This was the result of inadequate or unsuitable feeding."

It is greatly to be regretted that, at the present time, in view of the world food shortage, it is still impossible to provide the displaced persons with a fully adequate diet. The food element for some time will continue to have a bad effect on teeth.

As the situation stands at present, however, the dental service provided under UNRRA auspices in the British Zone of Germany provides the dis-

placed persons with quite comprehensive treatment. The number of displaced persons in the Zone has been considerably reduced through repatriation, as had been foreseen, to 379,834 at the time of writing. Over 100 dentists are actively engaged in attending to the needs of their fellow countrymen, including Poles, Latvians, Estonians, Lithuanians, Yugoslavs, etc. Fifty displaced persons, belonging to several national groups, are now enrolled in three dental schools at the Universities of Hamburg, Bonn and Cologne. Much work has yet to be done, particularly with regard to assuring the supply in a steady stream of certain materials still lacking. Local manufacture is, however, slowly improving, and a permanent solution to the supply problem will be attained soon. It is hoped that whichever agency takes over UNRRA's work in Germany, at the expiration of the UNRRA agreements, will find the dental problem among the displaced persons reduced to the lowest possible minimum under existing circumstances.



In the well-equipped UNRRA dental surgery at Fribourg, Dr. Bala Gavaller, left, DP dentist, works on patient. Watching him are Dr. Alexander Imbert, centre, French zone dental administrator, and Dr. Robert Davidson Bell, right, chief dental officer.

Unquestionably the doctor's best advertisement is his wife, if he is fortunate enough to possess one, but not someone else's, if he isn't. The doctor's wife is a woman of great importance. Even now, perhaps, she is on holiday with her husband and children, enjoying a well-earned rest and conducting herself with one eye on her husband's career and the other on her beach pyjamas, for the latter must excite no comment which could affect the former.

We need not discuss her many obligations and her duties in the home. These are either too well known or can be imagined. When all the people in the district where her husband practices declare, spontaneously, "I shall consult Dr. So-and-so, for he has such a charming wife," she may rest assured that she is a very satisfactory wife for a doctor to have. One of the hardest of her tasks, surely, is to continue to be friendly with all the ladies who think they have fallen in love with her husband. She may know perfectly well that one of them has a large photograph of him on the grand piano; and yet the very most she can do is to hope that it will topple off and break during the Spring cleaning.—Guy's Hospital Gazette.

He who is plentifully provided for from within needs but little from without.
—Goethe.

The Forum

SUGAR AND DENTAL CARIES

by HAROLD B. YOUNGER, D.D.S., Dallas, Texas

Excerpt from Jour. of D. for Children

Gottlieb states "It is an old and proved fact that ingestion of carbohydrates, especially sugar, promotes dental caries in susceptible people." It is also probably undisputed that caries-immune people can eat unlimited quantities of sugar without alteration of their caries immunity.

The following explanation is suggested. Caries immunity means that the organic roads are obstructed and no micro-organisms can invade. Neither can sugar penetrate the organic roads in these cases. In caries susceptibility, the roads are invadeable. Sugar sweetens these roads and improves the living conditions for the micro-organisms. The suggested impregnation by some factors of the saliva cannot take place so long as the roads are occupied by sugar. That might be the explanation, by Jay, (personal communication to the author) that after eliminating sugar from the diet for some time, some people can return to sugar without showing a new rise of the acido-

philus count. The lamellae, emptied of sugar, can become obstructed by natural impregnation, provided the saliva has been favourably changed. A return to sugar can do no more harm because the roads are obstructed. Those, however, who did not get a favourable change in the saliva quality while the sugar was eliminated from the diet, again have high acidophilus counts; i.e., as soon as the living conditions of the micro-organisms on the invasion roads are improved by a return to the use of sugar in the diet.

Here we might point out the difference in the explanation of the sugar action in the old and the new caries concept. The acid concept taught us that the carbohydrates are transformed into acid, which decalcifies enamel—and that means caries. The new concept asserts that the sugar itself improves the living conditions of the micro-organisms on the invasion roads.

ATOMIC ENERGY AND CANCER

by HYMER L. FRIEDEL, M.D.

Western Reserve School of Medicine, Lakeside Hospital, Cleveland, Ohio.

Summary of paper in Transactions of the College of Physicians of Phila., June, 1946.

I have presented no startling or arresting information on the attack of the Cancer Problem. However, we have in general, brought to your attention two fields for development:

1. The first is the opportunity for improving the therapeutic approach. New radiations and new radioactive

materials in an abundance which were not previously imagined, are now possible. These can be used for external radiation, for interstitial radiation and as radioactive materials in specific compounds which may be localized in various tissues.

2. A second and perhaps more im-

portant approach has been made possible by the ability to produce radioactive isotopes in abundance, to study the unwarranted behaviour of the cancer cell. The key to this probably lies in the use to which we may put C^{14} , but other elements (Hydrogen, Nitrogen, Sulphur, etc.) will be useful.

The success of the Manhattan Project in achieving its goal was unquestionably accomplished by difficult and intensive effort, but its success lies primarily in the fact that its development was based on certain fundamental and substantial corner stones. These were among others, the discoveries of fission and its attendant release of energy, the identification of fissionable materials, and the recognition of the possibility of a chain re-

action. Although we have not yet uncovered similar fundamental corner stones in the approach to the cancer solution (perhaps from my limited vantage point, I do not recognize or appreciate them), real progress can be made by united and intensified efforts. We must impartially explore all fields; we must encourage, organize, and coordinate unhampered biological research; we must maintain that continuity which best assures full integration of all the data and information which may be developed. Once we gird ourselves to the task and pursue relentlessly all approaches, these fundamental corner stones will be uncovered and the solution we seek will not be denied us.

CONCERNING TECHNICAL EDUCATION IN UNDERGRADUATE, POSTGRADUATE AND GRADUATE DENTAL SCHOOLS

by B. B. McCOLLUM, D.D.S.

Summary of paper in Harvard Dental Alumni Bulletin

A unifying technique in learning and doing dentistry will teach the undergraduate dental anatomy, oral physiology, the elements and the factors of articulation, oral diagnosis, and the methods of prescribing and compounding dental remedies. It will naturally lead to the taking of better impressions, making better casts, castings and fillings than can be taught in any other way. Impressions and casts are the basis or the beginning of our operations and they must be accurate or everything fails. Tooth preparations will be taught—not mere cavity preparations to hold a filling. A decent regard for the periodontium will be engendered. Furthermore, the student will grasp the idea of using oral plastic surgery when indicated in order to create the right kind of environment for the remedies inserted.

Such technical education will basically prepare dentists for all the phases of practice for it will mean complete treatment of the mouth. It will enable the dentist to formulate

a prescription for the treatment of the mouth that makes auxiliary personnel useful to him. The dental technician can become a "dental pharmacist" and base his efforts and cooperation on a sensible foundation. The dental hygienist and dental assistant will become valuable to the dentist as the nurse is to the physician and in the same way. The much talked of threat of certain parts of dentistry being taken over by dental laboratories will disappear. "Master and servant," "Dentist and sub-dentist" plans will no longer be tenable. This suggested method of teaching dentistry will not only create the proper concept of dentistry's purpose but will create honour for its possibilities and responsibilities, and will also teach how these concepts can be given actuality in a patient's mouth. This plan of teaching could easily become the "technicus"—the teacher of all dentistry. It qualifies the D.D.S. or the D.M.D. to take the Hippocratic Oath and live up to it.

HELPFUL HINTS

From Bal. of Ont. D. Nurses' and Assistants' Assoc.

1. To get that high polish on models soak them overnight in a saturated solution of castile soap and water, dry thoroughly, rub well with chamois or kleenex.
2. Dampened tea bags are excellent to stop excessive bleeding after extractions, especially as an emergency home treatment.
3. To clean hardened amalgam from the serrations of clogged amalgam pluggers, heat the points and dip them in muriatic acid.
4. When packing cement dip the packing instrument in alcohol so the cement will not stick to the instrument.
5. A fine gloss can be put on dentures by brushing them with a little glycerine after polishing and then rubbing briskly with a dry cloth.
6. Drinking glasses will sparkle like new and not have that dull appearance so common to many offices, especially where only hard water is available, if you will fill the glasses with vinegar, let stand for ten minutes then rinse and dry.
7. Mark Doctor's initials on all impression trays and articulators with a No. 1 round bur. It will act as identification and always insure their return.
8. To keep the inside of the sterilizer clean fill it $\frac{3}{4}$ full of water, add 1 cup of vinegar and boil for $\frac{1}{2}$ hour, empty, wash with soap and water and rinse thoroughly. This should be done once each week.
9. To clean and polish the outside of the sterilizer or other metal parts in an office wipe with a thin paste of bon ami and water. Permit this paste to dry on the metal for about twenty minutes then wipe off with a cloth dampened with household ammonia and polish with a dry soft cloth.
10. When clipping a towel on a patient select a horizontal fold part way down the napkin, instead of the edge to make it fit close to the neck and extend across the shoulder where the Doctor works. (It also does not gap down the front as soon as the towel has worked down.)
11. To have threaded suture ready to use—wrap the suture around a cotton roll beginning at the end of the suture and rolling toward the needle. Then stick the needle into the end of the cotton roll. This can be stored ready for immediate use in alcohol.
12. If you are in a hurry to dry an x-ray film dip it in alcohol, blow it dry with an air syringe in thirty seconds with absolutely no injury to the film.
13. To guarantee easy moving forceps put just a few drops of spirits of ammonia on the joint of hard-working forceps immediately after removing them from the sterilizer. Work them back and forth a few times and notice the improvement.
14. To keep instruments bright place a piece of camphor ice in the instrument cabinet. It has the same results on silver at home.
15. To remove wax spots from office gowns or other articles of clothing, place a clean cloth over the spots and rub with a hot spatula. The cloth will absorb the wax leaving the garments perfectly clean.

Children are born actors and love the centre of the stage. At first the child often has not developed a taste for sugar but soon accustoms himself to eating candy because of the applause of the family. Father also enjoys the enthusiastic welcome which he receives when he brings home a bag of candy, little realizing the big dental bills he will have to pay later. If he would bring dates, figs, raisins or prunes he would get as much applause.—Dr. Evangeline Jordon in D. Items of Interest.

BENJAMIN FRANKLIN, 1706-1790

by F. A. WILLIUS, M.D., M.S. in Medicine, and T. E. KEYS, M.A., Reference Librarian

Condensed from Proceedings of the Staff Meetings of Mayo Clinic.

Benjamin Franklin was, without a doubt, America's most accomplished citizen. He was printer, author, inventor, scientist, statesman, diplomat and benefactor of the human race. He wrote on electricity, seismology, geology, meteorology, physics, chemistry, astronomy, mathematics, hydrography, horology, aeronautics, navigation, agriculture, ethnology, paleontology, ethics, medicine, hygiene and pedagogy. In spite of many hardships endured in his youth and a life packed with diversified activities and at times vested with tremendous responsibilities, this remarkable man lived to the age of eighty-four years and three months.

Benjamin Franklin was the last son of a family of seventeen children. His father had married twice. On his father's side he was descended from a robust line of ancestors, chiefly blacksmiths. His father, who was engaged in a less strenuous occupation than that of his forebears, was nevertheless strong and active, and his mother was a healthy and energetic woman. Franklin once wrote, "I never knew either my father or mother to have any sickness but that of which they died, he at eighty-nine and she at eighty-five years of age." His was a notable heredity.

Owing to the fact that the Franklins were a remarkably large family, the children had little opportunity to acquire education, and young Benjamin was enabled to secure only two years of schooling. At the age of ten years he began to work for his father, casting candles, trimming wicks and running errands. When only ten years of age young Benjamin developed a great passion for reading, and in a very brief period had read all the books in his father's limited library, consisting chiefly of theological works. His unusual interest in books prompted his father to have Benjamin learn the trade of printing and at the age of

twelve years he was apprenticed to his older half-brother, James, in Boston.

Although he was not possessed of a medical degree, Franklin never relinquished his interest in this field, and cultivated the friendship and acquaintance of numerous renowned medical authorities of his era, not only in America but also in the British Isles, France and Austria. Perhaps the most coveted honour in the scientific world at the time was membership in the Royal Society of London. He was elected to this Society in 1752 where he became the friend of Joseph Priestley, Richard Price and Sir John Pringle, physician to the King. Harvard and Yale Colleges both awarded him the honorary degree of Master of Arts in 1753. In 1759 the University of St. Andrews in Scotland conferred upon him the degree of Doctor of Laws, and three years later the degree of Doctor of Civil Laws was awarded him by the University of Oxford.

In 1772 Franklin was elected a foreign associate of the Academy of Science of France, and in 1776 he presented a paper before the Royal Society of Medicine in Paris, "On the Nature and Origin of Epidemic Catarrhal Fevers." This study had been carried out in collaboration with Dr. Perkins of Boston. In 1781 he was elected to membership in the Medical Society of London. Franklin, furthermore, was one of the founders of the American Philosophical Society.

Franklin was one of the founders and sponsors of the first hospital to be built in the United States, an action which later resulted in the establishment of a medical school. Franklin was a believer in the health-giving qualities of fresh air and proper ventilation.

He was greatly interested in inoculation against smallpox. During his

experimental studies with electricity he became interested in its possible therapeutic value in certain disturbances of the nervous system, particularly those in which paralysis exists. He was a

pioneer in the recognition of lead poisoning. He was ever alert for new botanical species that possessed medicinal properties.

VICIOUSNESS OF FEE SPLITTING

by JOHN J. LUSARDI, D.D.S., F.A.C.D., Jersey City, N.J.

Excerpt from J. 2nd Dist. D. Soc., Oct. 1946.

A situation that has gained a vicious foot-hold in the profession is the tendency on the part of the general practitioner to receive a portion of the fee paid by the patient to the specialist—in other words, just plain fee splitting. This reprehensible practice in organized dentistry or medicine is just plain larceny in which the patient becomes the victim.

The notorious gangsters of the underworld are dignified in comparison to this form of thievery. The public is well aware that Schultz and Capone were criminals and were not bound or governed by any code of ethics or conscience such as is supposed to govern the doctor.

Whatever work the specialist performs, be he orthodontist, prosthodontist, or oral surgeon, he should be paid solely for the services he renders that

patient, and there can be no logical reason for the referring dentist or physician receiving any portion of the fee paid.

Place yourself in the position of the patient. How would you feel if you knew such a practice was being imposed upon you? In other words, how would you feel if you knew that an operation that normally would cost you \$50.00 was jacked up to \$100.00 just to reimburse the man who referred you?

It is strictly against the code of ethics of the American Dental Association and the American Medical Association and should be revolting to any professional man who is endowed with a God-given conscience. It is a form of graft that stultifies both parties, and should not be tolerated in a dignified society of professional men.

I hope that penicillin, and the necessity for knowing what infection you are treating if you are going to use penicillin, will now make people think that the bacteriologist has some use in the world, and after all it is just as well to know what you are treating before you treat it. It is all very well to say you are going to cure pneumonia with penicillin. You will cure most of the patients. Pneumonia is generally a pneumococcal infection; it may be a streptococcal infection or a staphylococcal infection. But it may be due to Pfeiffer's bacillus or Friedlander's bacillus, in which case you won't cure it. It is not the disease you are combating with penicillin; it is the microbe.

If you use penicillin against sensitive microbes, and if you use it carefully enough to get the penicillin at the microbe, you will get good results. If you use it against insensitive microbes or if you are very casual in your treatment, so that the penicillin never properly reaches the microbes, you will have disappointments. — Sir Alexander Fleming in Proceedings of the Staff Meetings of the Mayo Clinic.

"The worst discord is when too many people are wanting to play solos on their own trumpets".



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Editorials

DENTISTRY MOVES FORWARD

While we of the United Nations have little cause for satisfaction over the progress that has been made at our so-called peace conferences, while the achievements so far listed seem little less than a conglomeration of compromises, while problems have arisen that bode no good for the future of world peace, problems which at best affect adversely many millions of people, I felt, as I attended the 22nd Annual Fall Clinic of the Montreal Dental Club, that our profession, at least, was making definite progress, not only for the members of the profession, but particularly for the public generally, in so far as dental health and to a considerable extent, general health is concerned.

Dr. M. L. Donigan, the general chairman of this clinic, out of his wide experience in conducting such meetings, again produced a function of outstanding merit. One might dwell upon the sound advice contained in Dr. A. W. Mitchell's timely presidential address; upon the excellence of the table clinics, and the group clinics; Dr. C. H. M. William's splendid presentation of the subject "Lesions and Conditions of the Oral Mucosa", and the inspirational "Forum on the Centenary Anniversary of the Discovery of Anaesthesia". But the address I wish to quote from at length is that which was given by Dr. B. G. Bibby, Dean of Tufts College Dental School, Boston, Mass., since he was considering one of the most vital problems facing our profession in these days and one in which everyone, everywhere, should be interested, namely, the control of dental caries.

I would quote the following excerpts from Dr. Bibby's address: "Don't

get excited about the first report of any new discovery related to the marked reduction of dental caries. Wait until it is confirmed". "Reducing carbohydrate intake will reduce the amount of dental caries but we are fighting a losing battle when we consider the amount of propaganda advanced by the great financial interests, encouraging people, particularly children, to consume more sugar; therefore, one cannot be optimistic about getting the public to cut down on carbohydrates". "The oral lactobacillus acidophilus count is simply an index and not important in itself". "The amount of sugar consumed in a day is not as important as the frequency with which sugar is eaten: those who eat four times a day will have more caries than if they ate three times a day". "The flour and sugar breakdown in the mouth reaches its maximum within ten minutes and is completed within an hour: therefore, if one must have sweets they should be eaten at mealtime and only at mealtime: one should cut out the taking of coca cola, ice cream, candy, cake, etc., between meals". "Clean the teeth right after meals or end the meal by eating fruit". "Eat as well as you can and as seldom as you can". "If we can inactivate enzymes in the mouth, bacteria cannot form acids and preparations are appearing on the market with this end in view". "The value of vitamin K has not been established". "Preliminary work with penicillin is at least exciting and may prove to be most beneficial, particularly as an emergency procedure when other methods fail". "Before the tooth erupts, one can definitely improve the tooth structure by diet but after the tooth erupts, diet cannot accomplish much as far as structure is concerned". "If the fluorine content in the enamel is increased resistance to caries is increased". "If fluorine is present in the drinking water in quantities of 1 part per million at the time the teeth are being formed, caries will be reduced to an amount of possibly up to 50%". "Painting sodium fluoride on the tooth surfaces two or three times a year, drying section by section, and working a 1% sodium fluoride solution all over the surfaces of the teeth for several minutes, will reduce caries up to 46%". "There may be definite benefit from including sodium fluoride in the hygienist's prophylactic paste". "Other chemicals may be even more effective, since the principle is established that a chemical will assist in reducing dental caries". "Even though fluorides are added to the communal water supply, one must remember that one-third of our people secure their water from private sources, therefore in these cases some local treatment will be necessary". "Experiments in adding fluorides to dentifrices and mouth washes have not proven satisfactory". "Regardless of any benefit obtained from the use of chemicals we should still stress the well known proven beneficial results obtained from a reduction in the consumption of carbohydrates and any other procedures known to be helpful".

At this convention, it was the general consensus of opinion that Dr. Bibby had given a very fair and scholarly review of the newer knowledge related to the control of dental caries. As the result of some very fine pure research, there is strong evidence today that some considerable measure of

mass control of dental caries may be feasible. At this time it would seem highly improbable that prolonged ingestion of fluorine in the quantities recommended will bring about adverse physiological effects, however, further study is required.

One can be truly hopeful of the ultimate outcome when we have such men devoting their best thought and attention to these problems, a solution of which will make for a fuller and better life for mankind everywhere. However, be this as it may, we must all put our best into this work, no matter how long and arduous the road, that future generations may benefit from the efforts which we make today. I believe that we have reason to look for a not far distant victory, and that dentistry, thanks to the splendid efforts of its research workers, will have moved another step forward towards the pinnacle of achievement.

M. H. G.

DENTAL INCOMES IN CANADA

The Dominion bureau of statistics has published a report of the Survey that was made as to the incomes of the members of the dental profession in Canada from 1941 to 1944. According to this report about 40% of the dentists replied which is considered unusually high for a voluntary mail survey. In order to avoid the criticism that those replying were not representative of the whole group a ten per cent random sample of the non-responding dentists was interviewed by the staff of the regional offices of the Dominion Bureau of Statistics. The report concludes that there is good reason to have confidence in the national figures but that the regional breakdown should be used with caution because of their relatively higher sampling error.

One would have to know much more about this survey before one could intelligently discuss, for instance, the variation of the average income in the various provinces of Canada. However there are some figures in this report which no doubt are accurate enough to be able to draw some conclusions. We see that the gross annual income of the dentists of Canada is twenty-six and a half million dollars and yet at the present time, we only have one half-time salaried officer to look after our interests. Surely there are innumerable problems arising in the rendering of services of this magnitude which call for much more executive direction by full time salaried personnel.

Another startling conclusion is that the average cost of practice is over 50 per cent of gross receipts which presents another problem which calls for some direction as this percentage should be nearer 35%. This excessive overhead appears to be constant over the four years under consideration even though there has been a steady rise in average gross receipts during the last three years covered by the survey.

Perhaps one should also comment on the fact that less than 10% of Canadian dentists had incomes over \$7500 even in the banner year of 1944 and that this group comprised only 2.2% in 1941; furthermore, that the

average practice begins to deteriorate after 45 years of age. All this calls for thoughtful consideration if a dentist is not going to face an unhappy old age, and the best way to begin solving these problems is to make some reasonable effort to get our profession organized in a more efficient manner than ever before.

M. H. G.

BOOK REVIEW

Index to Dental Literature in the English language including 126 periodicals from Australia, Canada, England, India, South Africa and the United States.—Three years, 1942-1944. 354 pages. Published 1946 by the American Dental Association under the direction of the Committee on Library and Indexing Service of the Association, 222 East Superior St., Chicago. Price \$10.00.

This book contains an alphabetical subject and author index as well as a list of dental

books. The current issue is arranged according to a greatly extended and carefully edited set of Subject Headings, a list of which is included in a special section of the present volume.

To one who is studying any dental subject and particularly to one who contemplates the writing of a paper on any dental subject, this book should prove most valuable as one can see at a glance the list of publications and the articles which have been written on any particular subject.

M. H. G.

DENTAL CORPS NEWS

SUPPLEMENTARY LIST OF CANADIAN DENTAL CORPS OFFICERS

RETIREMENTS

Rank, Name and Date	Civilian Address	Rank, Name and Date	Civilian Address
Lt.-Col. M. A. Clay, 7-9-46	Saint John, N.B.	Capt. M. H. Singer, 21-9-46	Toronto, Ont.
Capt. A. M. Beaudry, 12-9-46	Outremont, P.Q.	Capt. J. W. Valiquette, 3-9-46	Smooth Rock Falls, Ont.
Capt. F. L. Burns, 7-10-46	Montreal, P.Q.	Capt. S. Granovsky, 16-9-46	Winnipeg, Man.
Capt. G. M. Dundass, 23-9-46	Montreal, P.Q.	Capt. R. J. McCarten, 19-9-46	Winnipeg, Man.
Capt. J. N. Fontaine, 4-9-46	Marieville, P.Q.	Capt. J. D. McInnis, 11-9-46	Winnipeg, Man.
Major M. Lamarche, 12-8-46	Maniwake, P.Q.	Capt. T. H. Walhoad (Walhovd)	
Capt. P. Leahy, 20-8-46	Quebec, P.Q.	16-9-46	Winnipeg, Man.
Capt. J. A. M. Mercier, 1-10-46	Quebec, P.Q.	Capt. G. E. Sayers, 27-9-46	Bresaylor, Sask.
Capt. P. M. Noel, 28-9-46	Quebec, P.Q.	Capt. L. K. Brooks, 1-10-46	Calgary, Alta.
Capt. J. Rauch, 10-9-46	Montreal, P.Q.	Lieut. B. W. Matkin, 30-9-46	Magrath, Alta.
Capt. J. G. Raymond, 7-10-46	Montreal, P.Q.	Lieut. A. A. Olsen, 4-10-46	Edmonton, Alta.
Capt. M. J. Butler, 7-9-46	Cannington, Ont.	Capt. B. D. Panar, 12-9-46	Calgary, Alta.
Major R. L. Clayton, 12-9-46	Riverside, Ont.	Capt. A. D. Sparrow, 21-9-46	Calgary, Alta.
Col. D. S. Coons, 4-10-46	Hamilton, Ont.	Capt. F. A. Fergie, 24-9-46	Sidney, B.C.
Capt. J. B. MacDonald, 16-9-46	Toronto, Ont.	Capt. J. B. Frankum, 26-9-46	Victoria, B.C.
Major L. M. Martin, 9-9-46	Ottawa, Ont.	Capt. J. N. Janzen, 12-9-46	Burnaby, B.C.
Capt. L. S. Mason, 4-10-46	Simcoe, Ont.	Lieut. B. W. McKay, 21-9-46	Nanaimo, B.C.
Capt. S. A. E. Merritt, 6-9-46	Toronto, Ont.	Major J. M. McDougall, 2-10-46	Vancouver, B.C.
Capt. C. J. Paterson, 9-10-46	Hamilton, Ont.	Capt. W. A. Robertson, 3-10-46	New Westminster, B.C.
Capt. A. C. Rust, 1-10-46	Willowdale, Ont.	Capt. W. N. Westwood, 1-10-46	Victoria, B.C.
Capt. W. K. Shultz, 5-9-46	Toronto, Ont.		

CANADIAN DENTAL ASSOCIATION NEWS

(FROM THE OFFICE OF THE SECRETARY)

Dr. Ratte Appointed to Board of Governors of Canadian Dental Association

At a recent meeting of the Board of the College of Dental Surgeons of the Province of Quebec, Dr. G. Ratte, 140 St. John St., of Quebec, P.Q., was elected as representative replacing Dr. Armand Fortier who recently resigned owing to ill health. Dr. J. K.

Carver was re-appointed and Drs. Y. La Fleur, St. Hyacinthe and C. A. E. McCabe, Valleyfield, were appointed as alternates.

Survey of Incomes

The distribution of the survey of incomes in the profession of dentistry in Canada 1941-44, as conducted by the Dominion Bureau of Statistics in cooperation with the

Canadian Dental Association, has been completed. Every member should now be in possession of a copy. A limited supply is available at this office and a copy may be secured by making application.

1947 Convention at Digby

The Housing Committee reports that reservations received to date will take up half the capacity of the hotel. All those wishing accommodation in the hotel should write the Chairman of the Housing Committee:

DR. H. S. CROSBY, Birks Building,
Halifax, N.S.

War Memorial Scholarship Fund

As of November 9, 1946.

RECEIVED FROM:

B. C.	500.00
Alta.	814.00
Sask.	902.00
Man.	500.00
Ont.	2644.50
Que.	1096.00
N. S.	522.00
N. B.	520.30
P. E. I.	
Interest	5.59

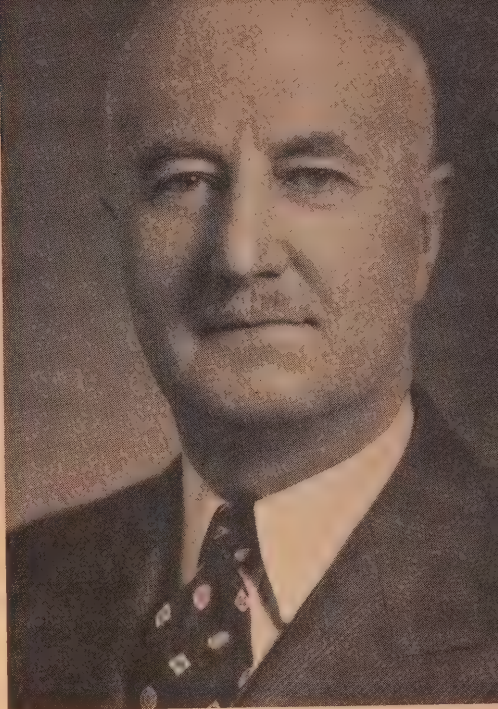
\$7,504.39

DON W. GULLETT,
Secretary, C.D.A.

Dr. Harry S. Thomson Honoured

At the annual meeting of the American College of Dentists, held in Miami, Florida, Dr. Harry S. Thomson was elected to the office of Vice-President.

The American College of Dentists was organized in 1920 to advance the standards of dentistry by conferring Fellowship in the



DR. HARRY S. THOMSON

College on those who had made meritorious contributions to Dental Science, Art, Education and Literature. Although an honorary body, the College has committees working to advance the interests and standards of dentistry in every phase of its activities. It has been responsible for the publication of several authoritative studies and reports in the fields of Dental Research and Dental Public Health.

There are at present about sixteen Canadian dentists who are Fellows of the College and it is a signal tribute to Canadian Dentistry that one of their number has been elected to office in the organization.

NEWS FROM THE PROVINCES

MANITOBA

Manitoba Dental Association

It is an extremely important and interesting development that seems to be taking place within the ranks of the dental profession in Canada as well as in the United States in that the professional audiences attending lectures and clinics at dental conven-

tions and refresher courses are just as large for biological studies as for operative dentistry or prosthetic restorations. This was noticed at the all Canadian Dental Convention in Toronto in May and again in Winnipeg on October 28 when the Winnipeg Dental Society brought Dr. M. K. Hine, Dean of the Indiana School of Dentistry, to talk on

Periodontal Diseases and again on November 4-5 when Dr. Charles H. M. Williams Associate Professor of Periodontology on the Faculty of Dentistry at Toronto University, appeared for two full days at the annual refresher course of the Manitoba Dental Association to lecture on the same subject. Both men are excellent teachers and both attracted large audiences who remained interested and were loath to see the courses terminate.

The Manitoba Dental Association held its 50th Annual General Meeting on the evening of the first day of Dr. Williams' visit. The business meeting was preceded by a dinner at the Fort Garry Hotel in Winnipeg and was attended by about 70 members. Additional interest connected with the dinner was the presence at the head table, as guests of the Association, of all the living past presidents of the Association with the exception of Dr. Norman Ross of Toronto, Dr. Manly Bowles of Winnipeg and Dr. H. A. Croll of Souris. The Past Presidents attending were Dr. M. H. Garvin, Dr. G. F. Bush, Dr. J. F. Taylor, Dr. H. J. Merkeley, Dr. E. H. Clark, Dr. W. W. Wright, Dr. D. A. McCarten, Dr. E. H. White, Dr. N. S. Bailey, Dr. A. E. Proctor, Dr. C. D. McLeod. These gentlemen all of whom are residents of Winnipeg, with the exception of Dr. Clark of Minnedosa and Dr. N. S. Bailey of Portage la Prairie, were presented to the gathering individually by the 1946 President of the Association Dr. A. R. Hurst of Brandon. Dr. Hurst asked the members to stand in silence in memory of two Past Presidents Dr. Herbert Greenfield and Dr. Garnet Leckie who had died during the years those present at the head table had been in office.

Several important resolutions were unanimously passed at the meeting and one or two referred to a later meeting of the Association to be called within the next 90 days to consider them.

One resolution of general interest to all the dentists of Canada who are members of the Canadian Dental Association was to the effect that the Manitoba Dental Association re-affirms the resolution passed three years ago in which we expressed the belief that the annual dues paid to the C.D.A. should be at least \$10.00 and undertook to pay that sum when a majority of the provincial cor-

porate dental bodies did likewise; and now in the interim beginning in 1947, undertake to pay the sum of \$8.00 per annum to the C.D.A.

As several of the provinces have raised their payments from four to five dollars for 1946 and one province to six dollars the Manitoba Dental Association has also paid the sum of five dollars per member.

One of the resolutions to be considered at a special meeting of the Association was a motion approving of the legalizing of the use of Dental Hygienists in Manitoba and asking the Board of Directors to take the necessary steps to bring this about. This motion was considered too radical to be voted upon without sufficient notice of motion hence the postponement. The meeting will likely take place on Wednesday, January 8th, 1947 in Winnipeg.

Due notice will be sent by mail to all members of the Association.

A resolution receiving enthusiastic and unanimous approval was one making Dr. H. A. Croll of Souris, Manitoba, a Life Member of the Manitoba Dental Association. Dr. Croll this year celebrated his 50th anniversary as a graduate in dentistry. He has practised at Souris since 1902.

J. F. M.

Winnipeg Dental Society

After the highly successful opening meeting of the 1946-47 season held in October with a prominent American dentist in the person of Maynard K. Hine D.D.S., M.S., Periodontist and Dean of the Indiana University School of Dentistry as the Guest Speaker the Executive of the Winnipeg Dental Society pinned their hopes for an equally well attended November meeting on local clinicians both of whom are oral surgeons; namely, Dr. William Robb and Dr. Roy Bier.

Dr. Robb gave two clinics morning and afternoon on November 18, at the Deer Lodge D.V.A. Hospital and at the evening session of the same day Dr. Bier exhibited the Winter technique for removal of impactions using motion pictures and models to illustrate the method employed by Dr. Winter.

Both the daytime and evening sessions were well attended. Dr. Thos. Blight, President of the Society presided at all the meetings. The Society has an enrolment approaching 100.

Winnipeg Dental Nurses and Assistants

The monthly dinner meeting of this Association was held on November 4.

The meeting was well attended to hear Mrs. G. L. Strange, noted authoress, who gave a most amusing and informative talk on Canadian Authors and their books.

DOROTHY A. MCCULLOCH

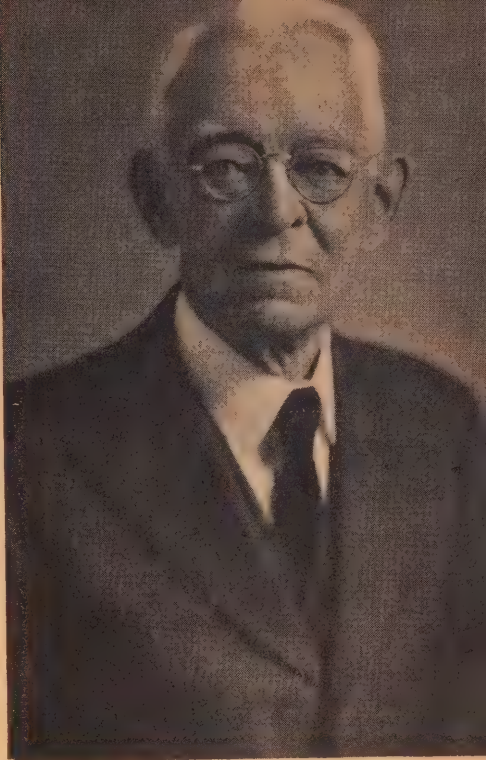
ONTARIO

Dr. W. E. Willmott

Dr. Walter Earl Willmott, after a life of active service to his beloved profession has retired to private life. He has an enviable record of stewardship having held executive positions in the profession for 57 years. He was secretary of the Royal College of Dental Surgeons of Ontario for 25 years, assistant secretary for 16 years and treasurer for 29 years. He served as a member of the School of Dentistry Faculty Staff of the Royal College of Dental Surgeons for 36 years and later he was a staff member of the Faculty of Dentistry, University of Toronto for 7 years. He was secretary-treasurer of the Ontario Legal Protective Association for 23 years and has served as a member of the University of Toronto Senate for 12 years as graduates' representative. All of which makes a fine contribution to development of his profession.

Dr. Walter, as he is affectionately known to so many Canadian dentists, is quite enjoying his freedom from responsibilities. Frequently he still attends meetings of dental societies, many of which have honoured him with a life membership. These occasions are enjoyable because of fellowship and comradeship with "Boys" he gave instruction to in undergraduate days. Dr. Willmott had many fine qualities but no one who knew him will forget his friendliness and his ability to remember names. These traits coupled with his fine Christian character always inspired a warm response from his legion of friends.

Dr. Walter is a noble son of a worthy Sire, who will always be remembered in the history of Canadian Dentistry. This noble heritage has been truly transmitted; it has not been a case of reflected glory but an instance of a work well begun, continued with zeal, initiative and honour.



DR. WALTER E. WILLMOTT

Best wishes for many years of happy holidays in your well earned retirement.

Complimentary Dinner to Mr. Charles A. McKenna

Fifty years of faithful service to the Dental Trade and Profession is a record of which anyone might well be proud. Yet we find Charles A. McKenna, who holds this record, not proud, but humble to a marked degree—as well as thankful that he has been spared to give a helping hand to the many who have sought his aid, his advice and his encouragement over the past half century.

On Friday, November 1, at the Royal York Hotel, over 150 friends of Charlie's gathered to celebrate this important event and to wish him well in the days ahead.

Among the group were members of the Dental Trade from Halifax, Montreal and Vancouver, as well as New York and Philadelphia. Many members of the dental profession were present, including representatives from the Canadian Dental Association, the



CHARLES A. McKENNA

Ontario Dental Association, the Toronto Dental Academy, members of the Faculty, the Royal College of Dental Surgeons, the Ontario Department of Health and the Toronto Department of Health.

The writer was privileged to be toastmaster for the banquet, and his task was made very pleasant because of the festive spirit which prevailed throughout.

The toast to the guest of honour was proposed by Mr. Ernest A. Bell, President of the Maritime Dental Supply Company, Halifax. Dating their years of friendship back to the good old days when the best rum could be bought for seventy-five cents a quart, Mr. Bell gave an amusing but very glowing account of Mr. McKenna's long and valuable service, not only to the dental supply business, but to the profession as well.

Suitable music was supplied by Canada's outstanding baritone, Mr. Eric Tredwell.

And while dentists and dealers were congratulating the guest of honour, they learned of another important event meriting special notice. The McKenna's were married 50 years ago, and friends from coast to coast in Canada and the United States join in congratulations to two of Canada's choicest citizens.

NORMAN ALEXANDER

Hamilton Dental Association

Nearly one hundred dentists attended the October 16 meeting of this Association, with the President, Dr. A. H. Leckie presiding. Following dinner the meeting was addressed by that prominent Canadian prosthodontist, Dr. Felix French of Ottawa. He was presented by Dr. J. N. Stewart. The subject of discussion was "Balanced Occlusion—Some of the Problems". The address was splendidly illustrated by slides and proved very interesting.

J. G. COUNTRYMAN

Ontario Dental Nurses' and Assistants' Association

The Board of Governors of this Association held its first meeting of the 1946-47 season in Hamilton on October 5 and 6. The President, Anne Kirkland of Kitchener, welcomed the representatives from most every Affiliated Association. The report of each Convener was read and discussed and plans for an extensive membership drive were made. It was decided that the Vice-President, Helen Dosman, be the official delegate to the American Dental Assistants' Convention at Miami, Florida, in October, 1947. Preliminary plans were made for the Sixteenth Annual Convention to be held in Toronto on May 19, 20 and 21, 1947. The next meeting will be held in Brantford, January 25 and 26, 1947.

Ontario Benevolent Fund

The work of the Ontario Benevolent Fund continues to be one of the outstanding features of our organization. Since the Crystal Convention in May, one wing of the new Sunnybrook Military Hospital in Toronto has been opened. Members of the committee in Toronto were invited to attend the official opening of this wing and were also shown through this fine new building. The committee have continued to spread cheer among the patients at Red Chevron Sunday evenings. In addition several parcels have been sent to England to help relieve the hardships which so many Englishmen still must endure. Mrs. Blaber announced that the Annual Christmas Party for the 200 adopted patients at the Red Chevron Military Hospital would be held December 21, and extended an invitation to all members to attend. Such an extensive undertaking requires loyal financial support from each Affiliated Association. In order to

meet this situation all Associations were given sufficient envelopes last June for each member to contribute a dime a week for the summer months. At present the final results are not known but it is expected that this endeavour will be successful. The 2nd Vice-President of the Vancouver Dental Assistants' Association, Miss Rita Cowan, was so impressed with the splendid work being done through the Benevolent Fund that she expressed a desire for her Association to assist financially in this undertaking. As a result their members are conducting a Raffle of a Petit Point Picture of Robert Burns' Cottage made by a patient at the Red Chevron. The Ontario members greatly appreciate this effort and can assure their friends beyond the Rockies that the funds obtained from their work will bring a great deal of happiness to the boys. Although it is humanly impossible for each one to give of her time to visiting hospitals and packing parcels, it is within the power of all to see that it is possible for this work to continue by contributing financially. There is a very simple way to do this, that is, by merely saving all scrap amalgam and sending it to any dental depot designating that the cheque be forwarded to Mrs. Leta Blaber, 148½ Bloor St. W., Toronto. Keep this in mind so that the Benevolent Convener and her committee can continue their work and help lighten the monotony of the patients and friends at the Red Chevron.

AFFILIATED ASSOCIATIONS

Hamilton Affiliated Association

Thirty-five members of this Association met for the first meeting of the season on Oct. 16. Mr. George Tobey of the L. D. Caulk Co. gave a most interesting talk on "Alloy, Silicates, and Cements" and followed this by a demonstration. The girls had a question and answer period after Mr. Tobey's lecture which was very beneficial to both the old and the many new members.

Kitchener Affiliated Association

The 1946-47 season of this Association took the form of a Miscellaneous Shower in honour of Muriel Weber. The girls met at the home of the President who conducted a short business meeting. Plans for the ensuing year were made and several new members were welcomed to the group. It was decided to

have a Harvest party in October and invite every girl in the surrounding districts to attend. Miss Olheiser served lunch and a pleasant social hour was enjoyed by all.

On October 9 the members of this A.A. met at St. Andrew's Church for their Harvest party. Nurses from Guelph, Galt, Preston, Hespeler, Acton, and Kitchener gathered around a cheery fire place gaily decorated with corn stalks and sheaves of wheat for a short business meeting. The secretary read a report of the recent executive meeting. Anne Kirkland conducted a musical quiz and musical games. The local executives were hostesses and served refreshments later in the evening.

Niagara Affiliated Association

Miss Verna Eckford was hostess to the dental nurses and assistants in the Niagara district in September. Plans for the ensuing year were made followed by a social hour.

Ottawa Affiliated Association

This Association met on Sept. 24. Following dinner the members were the guests of the Eastern Ontario Dental Association to hear a lecture by Dr. Munn of the Cooke Waite Laboratories. After his lecture, Dr. Munn showed several motion pictures which illustrated various techniques of his subject of the evening, "Local Anaesthetics".

Twenty-three members attended the October meeting at which Miss Mildred McNeish won the plastic apron which was raffled. Rev. Father D. Cahill demonstrated the power of electrical energy relating to dentistry and proved to be very interesting, and he then showed the intricacies of amateur radio receiving and transmitting. Dr. Paul Cote and Mr. Lester Akesson of Denco Ontario Ltd. donated cigarettes to the members. Miss Alice Sampson was the hostess of the evening.

Windsor Affiliated Association

On Sept. 10 with Miss Shirley Graham presiding it was decided to have a Rummage Sale in October, also a tea. The new executive is as follows: President, Shirley Graham, Vice-President, Irene Brown, Recording Secretary, Shirley Green, Corresponding Secretary, Beatrice Perkins, Treasurer, Ivy Core. In October the Windsor members met at the home of Ivy Core. Mrs. Yaxley, beauty demon-

strator for the Avon Beauty Products was the guest speaker. It was decided to raffle two pairs of Nylon hose, the draw to be made at the November meeting.

Academy of Dentistry, Toronto

Fellows of this Academy enjoyed a very timely and profitable address from Dr. Emil Hausser, Orthopedic Surgeon, from Chicago. His subject was "The Health and Posture of the Dentist." He discussed at length the disorders resulting from the occupational posture of the dentist where offsetting prophylaxis is not applied. Preventive treatment consisted of (1) a rest period of lying down for 20 minutes in the middle of the day and again after the evening meal; (2) moderate exercise outdoors, such as walking erect as possible, and cultivating hobbies out in the open. The address was most instructive for the overworked dentist.

Niagara Peninsula Dental Society

This Association held its opening meeting of the season 1946-47 at the Welland House in St. Catharines on Thursday, November 21.

Dr. S. Howard Payne, Associate Professor and Acting Head of the Department of Prosthetics, University of Buffalo, Buffalo, N.Y., was the guest clinician and his subject was "Immediate Denture Technique." Dr. Payne's address was accompanied by coloured motion pictures of his technique which was most enthusiastically applauded by our members. Dr. Payne is a clinician who could be highly recommended by any dental society.

Dr. Harold Shaver of St. Catharines was welcomed back to the community and our society. Drs. W. B. Malloch of Niagara Falls and H. Tytanek of St. Catharines were introduced to the meeting. Guests of the society were Dr. Bert Field of Hamilton, Member of the Board of Directors of the Royal College of Dental Surgeons of Ontario and Dr. Lee Kilburn of Hamilton district, Department of Veterans Affairs, Dental Division, both of whom spoke briefly to our members.

The Niagara Peninsula Dental Association passed a motion to approve an increase in our annual license fee in order to offer sufficient financial support to the Canadian Dental Association, the only representative organization of the dental profession.

Secretary Niagara Peninsula Dental Ass'n.

R. F. ROGERS, D.D.S.

F.A.C.D. Conferred on Dr. R. G. Ellis

The coveted honour of Fellowship in the American College of Dentists has recently been conferred on this well deserving Canadian dentist. Dr. Ellis has made numerous contributions to dental science and is still quite a young man. About one year ago he published a book "Classification and treatment of injuries to the teeth of Children", and has written many articles for our best Journals. At present he is Professor of Operative Dentistry and Director of the Clinic in the Faculty of Dentistry, University of Toronto.

Dr. Ellis is widely known in Canadian dental research promotion. He is chairman of the Associate Committee for dental research, National Research Council of Canada; Chairman of the Research Committee of the Canadian Dental Association and was recently appointed to the advisory committee on Scientific Research, University of Toronto.

Not only is Dr. Ellis talented but he is enthusiastic and sincere in all his undertakings. His many friends and associates tender their congratulations.

William M. Temple Dies

Mr. W. M. Temple, president of the Ash Temple Co. of Canada died on November 28 in Toronto. He was associated with the firm for 40 years and has been president since the death of Mr. H. P. Temple in 1944.

Mr. Temple was a considerate and kindly man with a keen sense of humour. In his early years he was an ardent yachtsman and was a life member of the Royal Canadian Yacht Club. He was a golfer and an enthusiastic fisherman, being very fond of Algonquin Park. He had a fine appreciation of Art.

He was a member of St. Paul's Anglican Church.

Surviving him are his widow, two daughters and one son.

QUEBEC

Montreal Dental Club 22nd Annual Fall Clinic

This annual event was held in Montreal on October 23-25. For those three days Dentistry surely held sway at the Mount Royal Hotel; there were dentists to right of you and dentists to left of you and dentists all around you, to say nothing of the huge ball room which was filled to overflowing

with exhibitors displaying all the latest contrivances pertaining to the profession.

Since the inception of these clinics in 1925, each one in turn has proven a great success: this one more than held its own with all previous ones in every department, and a great deal of credit must go to the committee in charge for the splendid result. The registration was a record. Canada was represented from Prince Edward Island to Alberta. Newfoundland was represented, as were five states of the Union, and two dentists from Brazil were registered. It is interesting to note that 15 dentists from the city of Halifax attended.

The program was a very full one, starting off with table clinics on the first morning. These were exceptionally well attended, and of a high order. Besides local clinicians, Halifax, London, Three Rivers, Lachute, Toronto, Ottawa and Burlington, Vt., had representatives on this part of the program.

There were eight registered clinics as follows—

1. "Preventive Dentistry" by Walter Emerson Briggs, D.M.D. of Attleboro, Mass. The "before and after" picture of mouth neglect was well covered from childhood to adult age, and special emphasis was placed on real dentistry for children.

2. "Diagnostic Phase of Full Denture Construction" by M. M. DeVan of Philadelphia. Some years ago Dr. DeVan appeared before the Montreal Dental Club. Although since that time there have been many changes in full denture construction, it was good to hear him again preach with great emphasis the necessity for the conservation of the alveolar ridge as one of the prime requisites for successful dentures.

3. "Interpretation of Roentgenograms of Interest to the General Practitioner" by LeRoy M. Ennis of Philadelphia. In a very well chosen series of slides Dr. Ennis brought to light many of the errors in interpretation that are commonly made. Emphasis was placed upon the necessity of roentgenograms from different angles to confirm diagnosis and also the great need of them in edentulous mouths.

4. "Cavity Preparation and Impressions Using Water As A Lubricant" by J. C. Flanagan of Montreal. Dr. Flanagan has long been an enthusiastic advocate of water as a

desensitizer in cavity preparation, and his practical clinic proved that it can be done.

5. "Full Denture Impressions" by Harold J. Levine, of New York, N.Y. Dr. Levine placed his greatest emphasis on the predetermining of the peripheral borders in order to insure maximum tissue coverage.

6. "A Review of Present Amalgam Teaching" by J. W. Morton, of Montreal. Dr. Morton gave an excellent review of the amalgam problem to date. There is no question of the advantages of amalgam as a filling material when properly used, or of its disadvantages when abused. To secure the best from the material, sound cavity preparation is the first requisite. Dr. Morton favours mechanical mixing and mechanical condensation of the material.

7. "Management of Gingival Third Cavities" by Carl R. Oman, D.D.S. of New York. Dr. Oman stressed the large percentage of dental cavities that the gingival third group includes. Condensed gold foil remains the filling of choice in his opinion, although he claims a place for the acrylic inlay if it is malleted in with a few pellets of gold foil at the time of cementation. The silicate filling received no consideration at all for this type of cavity.

8. "A Complete Indirect Inlay Procedure" by E. M. Scribner, D.M.D. of Boston.

The open sessions included the following essayists—C. H. M. Williams, D.D.S., B.Sc., of Toronto, on "Lesions and Conditions of the Oral Mucosa". Excellent colour slides were used to illustrate the common conditions encountered by the practising dentist, with a discussion of the significance, treatment and prognosis of each.

B. G. Bibby, B.D.S., Ph.D., D.M.D., Dean of Tufts College Dental School, Boston on "Progress in Caries Control". Dean Bibby's presentation was a masterly one and it is hoped that his full paper may appear in the Journal before too long. He warned against taking too much stock in single reports that may appear relative to caries control, and suggested that adequate proof is needed before accepting a lot of new theories. He lauded the work that has been done by Mrs. Mellanby of England. In his opinion there is certainly some relationship between eating and dental caries, and he stated that

if you must have carbohydrates just take them at meal times, and added a good maxim—"Eat as well as you can as seldom as you can". Dean Bibby was somewhat optimistic about some of the newer work that is being done such as the local application of Sodium Fluoride.

A most interesting forum was held on the "Centenary Anniversary of the Discovery of Anaesthesia". This was introduced by H. E. Hoff, B.S. (Wash.), B.A., D.Phil. (Oxon), M.D. (Harvard), Professor of Physiology and Chairman of the Department, McGill University, who recounted the work of Dr. Wells, and Dr. Morton in the introduction of Surgical Anaesthesia. The progress in anaesthesia from discovery to date was traced by Wesley Bourne, M.D., C.M., M.Sc., F.R.C.P. (C); F.I.C.A., D.A. (R.C.P.&S. Eng.); Assistant Professor of Pharmacology and Anaesthesia, McGill University, and observations on the implications for the profession of Dentistry resulting from this discovery, were given by D. P. Mowry, D.D.S., F.A.C.D., Professor of Periodontia and head of the Department of Operative Dentistry, McGill University.

Louis B. Amyot, D.D.S., of Schenectady, N.Y., formerly Dental Officer for the Eastern Arctic Patrol, presented a 2000 foot Kodachrome film depicting life among the natives of the far North.

A progressive clinic, taking in three sessions, was given by Stephen B. Mallet, D.M.D., F.A.C.D., Oral Surgeon-in-Chief, Boston City Hospital, and associate Professor of Exodontia and Oral Surgery, Tufts College Dental School, on "Exodontia and Oral Surgery Problems". The clinician covered the whole field of mouth surgery paying particular attention to the correct method of incisions and flaps, and emphasizing the absolute need for a sterile technique in all mouth surgery. He mentioned the great aid that the use of penicillin had been in his work.

The three luncheons held were gala affairs. The first one was featured by the address of the President of the Club, Dr. Arnold W. Mitchell. His theme was mostly "Health" and "Health for the Dentist Himself". He gave some pretty pointed advice, and if it is all taken to heart dentists themselves will be a healthier happier lot. Noted as head

table guests at this luncheon were Dr. Victor Crowe, of Truro, N.S., Dr. Don Gullett, of Toronto, President and Secretary respectively of the C.D.A., and Dr. M. H. Garvin of Winnipeg, Editor of The Journal.

The second day's luncheon was featured by an address by Murray R. Chipman of Montreal, on "Humour—and the Spoken Word". This was most enjoyable and certainly relaxed for a little while a group of dentists who were perhaps, by that time, getting a little "shop-worn".

The third day's luncheon was in charge of the Club's President-Elect, Dr. R. B. Bell, who provided some novel entertainment in the form of a quiz contest.

Visiting ladies to Montreal were not forgotten, and some 50 of them were entertained at luncheon, and a sight-seeing trip of the city.

It was a good convention—Montreal was glad to welcome its visitors, and with one new large hotel now under construction and prospects of a second one before too long, it is felt that the physical requirements will be more adequate to take care of our confrères who visit us in future years at this annual event.

Again the word of thanks from the largest group ever to attend a Fall Clinic goes out to President A. W. Mitchell, Director M. L. Donigan and all who worked with them for a really splendid meeting. E. T. B.

President's Address at Montreal Dental Club's Annual Convention

This was not just another president's address but was the product of much thought in the interest of the dentist and his profession.

Dr. Arnold W. Mitchell, with vision and foresight, urged the membership to support the Canadian Dental Association one hundred per cent, thus bringing closer together the dentists from coast to coast.

The keynote of this fine address was HEALTH, a healthy mind and a healthy body. The speaker said that we must be free from worry, especially financial worry which calls for advice from a good Scotch bank manager. "It is wise to reduce working hours at an early age and fees should be increased". "Office surroundings should be as pleasant as possible and equipment kept mod-

ern as this is where we spend most of our life". "We should have the best possible lighting equipment regardless of cost".

Says Dr. Mitchell "Don't wait until you hear of a friend's heart attack before considering your own health". "We should avoid postural strain as much as possible". "Every man over thirty years of age should have an electrocardiogram taken and followed by a regular examination". "It is only by shorter hours of work, proper vacations, exercise, and improved working conditions that we will be able to avoid unnecessary trouble". "Everywhere you see tired, sick and worn out dentists neglecting themselves and being pushed around by the public". "Those of you who think you are supermen will come to an abrupt awakening one of these days and then it may be too late". "The only superman is in the comic strips".

In closing Dr. Mitchell said that he who will look after his health and he who will learn to live while he works, will find it easy to do better dentistry.

M.H.G.

Montreal Endodontia Society

On October 16 this Society met in the Dental Faculty of the Université de Montréal, with the President, Dr. Marcel Archambault in the chair.

Dr. Archambault made some well chosen remarks under three headings:

"That's a lot to say"

"That's a lot to be proud of"

"That's a lot to think about"

He pointed out how this Society was unique in the dental history of Montreal in that it included members from the three existing societies; he pointed with a little pride to what had been achieved in one year, and he gave a lot to think about when he laid down his plans for the coming year.

Ten new members were admitted to the Society at this meeting.

The speaker of the evening was Dr. A. D. Richardson, immediate past-president of the Society, and his subject "Re-introducing Endodontia to Endodontists", was much appreciated.

Société Dentaire de Montréal

At the November meeting of the Société Dentaire de Montréal Dr. Aimé Couture of Ottawa addressed the members on "Immediate Dentures". Clear and numerous models,

explaining the different phases of the treatment made the lecture most interesting.

Montreal Dental Nurses' Association

This Association held its 11th Annual Convention in the Mount Royal Hotel on October 23-25 in conjunction with the Montreal Dental Club.

The guest speakers were Miss Anne T. Vale of the Iverley Community Centre, who spoke on the "Challenge to the Community"; Dr. A. G. Racey of Montreal, who spoke on "Fluorine as pertaining to Dental Caries"; Dr. Louis B. Amyot of Schenectady, New York, who showed a 2,000 ft. Kodachrome film entitled "Arctic Patrol". The film depicted life among the natives of the far north; Dr. Walter E. Briggs of Attleboro, Mass., who gave a very interesting lecture on "Visual Education of Dental Problems". He also used plastic models to be prepared and painted by the girls during the lecture; Mr. H. T. Hamon of Montreal who spoke on the "X-Ray Machine, its Care and Use".

The following are the officers of the Association until Oct., 1947:

President Miss Joan Green
Vice-President Mrs. Jean Newell
Recording Sec., Miss Dorothy McRae; Corresponding Sec., Miss V. Phillips; Treasurer, Miss Mildred Fincher; Publicity Convener, Miss Olive Goodenough; Program, Miss Mildred Starr; Social & Reception, Miss P. Doyle; Membership Convener, Miss E. Larue; Assistant Convener, Miss R. Munroe; Convention Convener, Miss E. Derrick; Assistant Convener, Miss R. Munroe.

NOVA SCOTIA

Nova Scotia Dental Study

A study of dental conditions in Nova Scotia, possibly after the first of the year, is planned by Dr. Henry Klein, senior dental officer in U.S. Public Health Service. Originally the survey was to have been made in September, but has been held up.

Because of the isolation of most of its communities, Nova Scotia is considered especially interesting as a subject of public health surveys. Dr. Klein is particularly interested in one area that has had normal medical service but no dentist. For some time, medical doctors have performed all the dental requirements, but these naturally have been

limited to surgery and extractions.—"Nova Scotia Study," Dental Survey 22:1695 September, 1946, per Public Health Economics.

Kinsmen's Club Clinic

Through the good graces of the Kinsmen's Club the free dental clinic for school children has started again in Halifax. Much good was accomplished in last year's clinic. For this year the doctors in attendance will be J. I. Gordon, F. C. Fennell, I. G. Nathanson, J. R. Vaughan, who will serve in the following schools: Cunard St., Bloomfield, Quinpool Road, and Dalhousie Health Centre.

BRITISH COLUMBIA

Vancouver and District Dental Society

In Hotel Vancouver on November 5 this Society held its regular monthly meeting.

Dr. M. R. Chipman, who practices Orthodontics in Spokane, Washington, was the guest speaker. He read a paper on "Endocrinology and Dentistry". Following his paper he showed a number of slides illustrating different points in his paper, among these were manifestations of endocrine disturbances apparent in dental radiograms. He stressed too the importance of medicine in relationship to dentistry. The well attended meeting was very appreciative of Dr. Chipman's presentation.

The Diagnosis, Prosthetic and Dental Medicine Study Clubs reported progress in their activities.

Dr. Emery Jones as President gave a brief report on the activities of the College of Dental Surgeons of B.C.

The following were elected to membership in the Society:

Drs. C. Ames, J. Maimark and R. J. Warshawski, graduates of the University of Alberta; Drs. W. S. Q. Chu, W. L. Elliot, N. Hirschberg and G. Robb, graduates of the University of Toronto; Drs. J. A. Folkins and M. J. Waterman, graduates of McGill University; Drs. C. T. Billingsley, R. W. Davis, H. C. McWilliams and A. R. Patterson, graduates of North Pacific College.

Vancouver Dental Assistants' Association

On October 7 the regular dinner meeting of this Association was held in the Pacific

Athletic Club with the president Rita Cowan presiding.

Major H. E. Simmons of the D.V.A. Shaughnessy Hospital, paid a return visit by popular request. His very interesting address on oral and plastic surgery as performed by the C.D.C. at East-Grinstead Hospital, England, was augmented with models of actual cases. Mr. Howatson of the Junior Board of Trade presented a National Film Board's motion picture "New Faces Come Back". This was interspersed and followed with comments by Major Simmons.

An invitation had been extended to the members of the Vancouver and District Dental Society to attend the dinner and evening's entertainment. A goodly representation was present much to the delight of the members.

A drawing was held for a beautiful needle-point picture made by a veteran of the Red Chevron Branch of Christie St. Hospital, Toronto, on behalf of the Benevolent Fund of the O.D.N. & A.A. The Association was pleased to be able to send Leta Blaber a cheque for \$37.00, the proceeds of the drawing.

Forty-eight girls attended the meeting on November 4. The guest speaker, Dr. Emery Jones of New Westminster, delivered a most interesting address on the "Evolution of the Dental Nurse and Hygienist".

On the suggestion of the President, Rita Cowan, a number of members volunteered to work in the Canteen at Shaughnessy Hospital. The enthusiasm with which this proposal was received enabled the Association to promise Shaughnessy Hospital 10 girls every other Saturday evening.

A number of sewing bees at the home of the President were arranged for the next month, the objective being the completion of the bedspread which will be raffled in December.

The Registry for unemployed girls is now functioning very satisfactorily and during the past months many girls have been placed. The doctors have been taking quite an interest in this and have been watching it closely.

RITA RUSSELL

ALBERTA

Edmonton Dental Society

Fifty members attended the November 5 meeting of this Society with Dr. J. C. Ward, the President, presiding.

The highlight of the evening was a paper on "Class Five Gold Foils" by Dr. H. R. MacLean, Professor of Operative Dentistry, University of Alberta Dental School. In his paper Dr. MacLean covered: (1) Incidence of this type of cavity; (2) Preparation of the field by use of local anaesthetic and rubber dam; (3) Cavity preparation; (4) Selection and insertion of gold foil; (5) Finishing and Polishing. In conclusion he remarked

that if he were limited to one particular type of cavity for the insertion of gold foil, he would choose a Class Five cavity.

Calgary Dental Society

Forty men attended the November 12 meeting of this Society. Mr. Wm. F. Reid, chartered accountant spoke on "Income Tax Problems".

EMPIRE NEWS

GREAT BRITAIN

Dentists Are Not on Strike

The Joint Advisory Dental Council, which represents the organized dental profession in Great Britain, met on September 11 to discuss the refusal of the Minister of Insurance, the Minister of Health and the Secretary of State for Scotland to approve the Scale of Fees for the treatment of Dental Benefit patients which was unanimously put forward by the Negotiating Committee of the Dental Benefit Council.

The Advisory Council is seriously concerned that the national press should have gained the impression that there is a strike of dentists. Nothing could be further from the truth. No dentist has closed his surgery, no dentist has refused to treat a patient. The Joint Advisory Dental Council decided to advise all dentists to adopt a similar attitude and to undertake official contracts, or dental letters as they are termed, only on the scale of fees which was put forward by the Dental Benefit Council.

The Dental Benefit Council set up a special Negotiating Committee of three dental and three approved society representatives with Government members. After going into the statistics of increased costs of running dental practices and the private fees normally charged to the same class of patient as the Dental Benefit patient, the Committee reached a unanimous decision and put forward to the Dental Benefit Council a scale of fees which was carried by the Dental Benefit Council by a majority vote. It was submitted for final approval to the Government Departments concerned and they rejected it.

The fee for full upper and lower dentures before the war was £5 10s., as against the

fee of £6 which operated in 1926. The fee operating now after twenty years' interval and six years of war is £6 7s. 6d. The fee rejected by the Government was nine guineas. The fee which the Minister seeks to impose is £7 15s.

It is important to emphasize that in putting forward the proposals for a revised scale the dental profession was satisfied that it could not foresee a satisfactory dental service for the insured population at any lower scale. The Minister's offer of an alternative scale is rejected for precisely the same reason. It is important also to emphasize once again that the scale rejected by the Minister was put forward unanimously by a Negotiating Committee of the statutory body representative of dentists and approved societies after very lengthy and careful examination of all the relevant statistics and information.

Dentists everywhere are in their surgeries available for the treatment of patients but not at the scale which the Government seeks to impose and, therefore, not under contract with the Government. Meetings are being arranged throughout Great Britain at which the profession will be asked to affirm the attitude of its leaders and at which the Press will be welcomed.

Salary of Dentists

A nine-member committee, including four dentists, has been appointed by Aneurin Bevan, Minister of Health, to recommend 'what ought to be the range of the total professional income of a registered dental practitioner in any publicly organized service of general dental practice'.

The chairman of the committee is Sir William Spens, who recently headed a

parallel inquiry on pay for National Health Service doctors. The committee's terms of reference include consideration of the desirability of maintaining 'the proper social and economic status of general dental practice and its power to attract a suitable type of recruit'.—"Dentists' Pay Study Set," New York Times 95:25 September 4, 1946—per Public Health Economics.

National Health Bill

The House of Commons has endorsed Health Minister Aneurin Bevan's national health bill, under which every Briton will be able to claim free medical attention against payment of a compulsory weekly insurance

levy. It now will go to the House of Lords, whose large Conservative majority recently has shown increasing disposition to cross the Labour Government. The Lords can delay but not block legislation.

Sir Ernest Graham Little, Independent, a well-known medical specialist, declared the projected health service would require three times as many doctors as were at present available. Doctors, he added, would not strike in protest at the bill, but the majority would try to go on working as at present, staying outside the state service.—"Commons OK's State Health Bill in Britain," Christian Science Monitor 38:2 July 30, 1946, per Public Health Economics.

GENERAL NEWS

House of Delegates of the American Dental Association

At the A.D.A. Delegates' Meeting held in Miami, Florida, in October, it was decided to hold a full scientific meeting in Boston in early August, 1947, and it is expected that 15,000 dentists will attend.

The Federation Dentaire Internationale has been invited to meet at the same time in Boston to make plans for the Tenth International Dental Congress.

Sterling V. Mead of Washington, D.C., was installed as president, and H. B. Washburn of St. Paul as president-elect. Harold Hillenbrand of Chicago, editor of The Journal of the A.D.A. was elected general secretary for a three-year term, succeeding Harry B. Pinney, also of Chicago.

Major business handled by the delegates included the adoption of an expanded budget calling for estimated expenditures of \$753,000 in the new fiscal year. A major portion of the increase was allocated for expanding operations of the Bureau of Public Relations and for the publication of two full issues of The Journal of the American Dental Association each month.

Other major actions of the House provided for:

Continuance of the Washington, D.C., office of the Association to be directed by an assistant secretary. C. Willard Camalier will be in

charge of this office: A retirement plan for full-time employees of the Central Office staff was arranged: The retirement age was set at 65 years: A standing committee on Military Affairs is to be composed of five members, including three World War II veterans: A War Memorial Committee to plan a permanent memorial for dentists who died while serving with the nation's armed forces: and a Children's National Health Day to be proclaimed annually by the President of the United States.

The House approved a committee report upholding the action of the Council on Dental Education in suspending approval of the School of Dental and Oral Surgery of Columbia University.

The House reiterated its opposition to compulsory health insurance.

It recommended to state associations that dental hygienists be approved as ancillary aids and that the state organizations promote proper training courses for dental hygienists.

Percy R. Howe, of Belmont, Mass., director of the Forsyth Dental Infirmary for Children at Boston, was presented with a plaque for distinguished service to dentistry. He is the first living person to receive the honour. The award had been bestowed only once before when it was granted posthumously to Dr. Horace Wells, discoverer of the anaesthetic powers of nitrous oxide gas.

"A man can avoid making up his mind but he cannot avoid making up his life".

Canadian Naval Service Benevolent Trust Fund — Dental Treatment

The Canadian Naval Service Benevolent Trust Fund was incorporated on the 4th July, 1945, for the purpose of relieving distress and promoting the well-being of naval and ex-naval personnel and of their dependents. This Fund was created from the voluntary contributions of navy personnel, interested civilians and canteen profits of H.M.C. Ships. The Fund is registered under the War Charities Act.

Many applications handled by the Fund deal with accounts for dental treatment. Therefore, it is felt advisable to acquaint the members of the dental profession with the procedure used in dealing with these cases. The Fund is pleased to assist applicants if need for assistance is found to exist after an investigation is undertaken by the Fund's local representative. Where a case which appears to warrant assistance from the Canadian Naval Service Benevolent Trust Fund comes to the attention of a dentist, the matter should be referred to the local representative or direct to the head office of the Fund in Ottawa. The local representative is, in each case, the Commanding Officer of the Naval Division nearest to which the applicant resides. If possible, such reference should be made early in the course of treatment or investigation.

After consultation with the Canadian Dental Association, the Fund will settle accounts rendered to these patients in accordance with the scale of fees as approved by the Department of Veterans Affairs.

Where it is indicated that a patient may require assistance, the dentist should be cautioned as to the type of service he recommends as the Fund must necessarily limit its aid to non-luxuries. Where applicants can avail themselves of clinical treatment they should be encouraged to do so as assistance from the Fund in these cases will normally be restricted to the nominal fees charged by such clinics. In all cases the applicant will require a detailed statement of account for attachment to his application form. The same terminology as in the D.V.A. scale of fees is to be used.



DR. HAROLD HILLENBRAND

New Secretary for A.D.A.

Dr. Harold Hillenbrand (above), of Chicago, new general secretary of the American Dental Association, took office following his election at the 87th annual meeting of the House of Delegates at Miami, Fla., in mid-October. Formerly, Dr. Hillenbrand was editor of the A.D.A. JOURNAL and will continue to supervise the publication until his successor is chosen. As chief executive of the Association, Dr. Hillenbrand replaced Dr. Harry B. Pinney, also of Chicago, who retired after 19 years of service.

Chewing Gum

The general use of chewing gum by the public has not been shown to be desirable. In fact, there are many reasons to suspect that its use may be deleterious to the oral health of some individuals. Chewing gum contains a large amount of sugar. Excessive chewing by those who are handicapped by defective occlusion might be expected to aggravate the pathologic changes which sometimes appear in the mouths of such individuals. Repeated artificial stimulation of saliva has not been shown to be desirable or without bad effects upon the digestive system.—*Council on Dental Therapeutics of A.D.A.*

The Smithsonian Institution

"No ignorance is without loss to man, no error without evil." Such was James Smithson's credo. He believed in this so strongly that he spent his life in painstaking scientific investigations to push back the boundaries of ignorance, and when death cut off his own efforts, he bequeathed his fortune to the United States of America "to found at Washington an establishment for the increase and diffusion of knowledge among men."

On August 10, 1846 the Smithsonian Institute came into being when James K. Polk, President of the United States, affixed his signature to the act of its foundation. For 100 years the Smithsonian has carried forward Smithson's ideal through scientific research in many fields, through world-wide exploration, through publications embodying the results of original investigation, and through other accepted methods of increasing and diffusing information.—Science.

Minnesota Dental Foundation

On July 2, 1946, the Articles of Incorporation of the Minnesota Dental Foundation, Inc., were filed with the Secretary of State of Minnesota.

The objectives of the Foundation are as follows: "This corporation is organized and shall be operated exclusively for scientific, literary and educational purposes, including the stimulating of research for the purpose of improving the dental health of the public, the ascertainment, preservation and dissemination of information and knowledge in respect thereto".

Under the Articles of Incorporation, four classes of members in the Foundation are delineated as follows: (1) Foundation patrons, who shall be persons contributing \$1,000 or more to this Foundation; (2) Life members who shall be persons contributing \$100 or more to this Foundation; (3)

Annual members, who shall be persons contributing \$10 or more annually to this Foundation; (4) Student members who shall be persons contributing \$1 or more annually to this Foundation.

Throughout the life of the State Dental Association many opportunities for the acceptance of bequests and philanthropic contributions for the development of dental research have presented themselves, but at no time has the Association been enfranchised to accept such donations. These can now be accepted and administered by the Foundation.

The establishment of the Minnesota Dental Foundation provides the present and future dentists of the state with a challenge and a stimulus for reaffirming their faith in the altruistic principles of the profession.

N.-West Dentistry

Chicago Dental Society

The 1947 Midwinter Meeting of the Chicago Dental Society will be held at the Stevens Hotel, February 10-13. Officers and committeemen of the Society are planning a full scale meeting similar to those held prior to the war.

Dental Graduates in U.S.A.

Dental schools in the United States graduated 2,666 new dentists during the 1945-46 school year.

This total is the second largest in recent history of the profession and reflects the accelerated training program adopted by dental colleges during the war years.

The war-time peak of dental graduates was reached in 1944-45 when 3,212 dentists received diplomas. During the five years prior to the war, the average number of dental graduates was only 1,712 per year.

Present freshman enrolment at the nation's 40 dental schools, is in excess of 3,000 students, the highest in twenty years.

High wage costs per unit of production are powerful factors in forcing upward the prices at which goods are sold. It seems clear that the effects of the increased costs have not yet been fully rejected in current commodity prices. The only way to lower prices will be through increases in the volume of production without corresponding increases in hourly pay. This will be difficult to achieve, but it must somehow be accomplished, or the goods we produce will become so costly that industrial workers will no longer be able to purchase the goods that they and their fellow workers produce.—Cleveland Trust Co.

ANNOUNCEMENTS

National Convention of Canadian Dentists

under the auspices of the C.D.A. and N.S. Dental Assoc.
at the PINES HOTEL, DIGBY, N.S.

JUNE 24-27, 1947.

It may seem a far cry from the present time to next year's convention at Digby but it is of great importance that those planning to attend should notify the committee without delay regarding their intention. Already more than one hundred prospective delegates have done so.

One of the problems with which the committee is faced is finding adequate accommodation for the delegates. While the Pines Hotel is an up-to-date tourist resort, it has accommodation for less than three hundred guests. Quarters for the balance of the delegates must be found in various small hotels and tourist cabins in the vicinity. As the convention takes place a week before the official opening of the tourist season in Nova Scotia, arrangements must be made by the committee well in advance to ensure that these places are open and ready to receive guests. We will need to know your requirements by February.

For those coming by car, there are three main routes into Nova Scotia to Digby, the all road route, via the isthmus at Amherst, the car ferry from St. John to Digby, or the boat from Boston to Yarmouth, which carries cars. The St. John boat will accommodate fifty cars, and this has been entirely reserved for convention delegates leaving St. John on the morning of June 24. This boat arrives at Digby at 10:45 a.m. Delegates coming from Western Ontario and the Niagara peninsula might be better advised to come via Buffalo and Boston, and the boat to Yarmouth. Those who can, might well make a reservation for an earlier date. Date of return should be stated so ferry reservations may be arranged if it is not desired to make the round trip back by road.

All reservations will be arranged by the committee, provided we have notification in time. We also are prepared to furnish tourist literature and other information for those who desire to remain in the Province for a holiday trip.

G. M. LOGAN,
Camp Hill Hospital, Halifax.

Western Canada Dental Society

This Society announces a joint convention with the British Columbia Dental Association to be held at Banff, Alberta, on June 13-14-15, 1947.

The problem of accommodation at the Banff Springs Hotel is at all times extremely difficult, so every member who wishes to ensure space is advised and urged to make reservations before the end of December, 1946.

Reservations are now being accepted by Dr. F. M. Murray, 802 Southam Building, Calgary, Alberta, Chairman of Accommodation Committee.

IN MEMORIAM

Manly Bowles, of Winnipeg, Manitoba, aged 72, died November 21 following several months illness. He was graduated from the Royal College of Dental Surgeons of Ontario in 1899 and registered in Manitoba in 1903. For 43 years Dr. Bowles was a leading member of the dental profession in Western Canada, standing for the highest and best in the practice of orthodontia in which branch of dentistry he specialized. For several years he was Secretary and later President of the Manitoba Dental Association.

He was a member of St. Stephen's Broadway Church. He had been a member of the Winnipeg Golf Club and later the Niakwa Golf Club. He was a member of the Rotary Club and a life member of Northern Light Masonic Lodge.

Dr. Bowles is survived by his widow, two sons, three grandchildren, four brothers, and one sister.

M. A. Ross Thomas, of Toronto, Ontario, died suddenly from a heart attack on November 24 at the age of 66 years.

Dr. Ross Thomas graduated from the School of Dentistry of the Royal College of Dental Surgeons in 1904. He proceeded to London, Ontario to set up his practice where he continued until 1928 when he moved to Toronto. Dr. Thomas practised Periodontia as a specialty.

He has lived a very active life in his beloved profession in spite of his physical disability. He was a past president of the London Dental Society which organization he served as secretary for 15 years. He was a past president of the Ontario Dental Association and a member of its Public Health Committee for many years. He was a member of the Toronto Academy of Dentistry. Indeed his was a familiar face at all dental meetings in Central Ontario and his interest in dental affairs never waned.

Dr. Thomas was a member of York-

minster Baptist Church; a member of the Masonic Order and of the Scottish Rite; a member of the L.O.L. and of the Simcoe Branch of the U.E.L.

He is survived by his widow and one son, William Ross.

Harvey J. Burkhart, Director of the Eastman Dental Foundation, aged 83, died September 22 in Rochester, N.Y. He supervised the establishment of the Eastman Dental Clinics in London, Paris, Brussels, Rome and Stockholm.

At some time, Dr. Burkhart held virtually all of the important posts in his profession.

C. M. Fletcher, of Lethbridge, Alberta, aged 58, died suddenly October 23, while on a hunting trip. Following graduation in Dentistry in Chicago, he practised first in Cardston and later moved to Lethbridge.

He was very fond of camping, fishing and hunting and was prominent in the Boy Scout movement, being a former scoutmaster. Just a few days before his death he was elected President of the Lethbridge District Scout Council. He was a member of the Lethbridge Kiwanis Club for a number of years and president of the St. John Ambulance Association for several years.

Dr. Fletcher is survived by his widow, two sons and two daughters, also a brother and a sister.

Frederick L. Gower, of Meaford, Ontario, aged 63, died on October 31. He was graduated from the Royal College of Dental Surgeons of Ontario in 1909. He began practising in Tara and in 1911 he moved to Meaford where he remained until his death.

He was a member of Pythagoras Lodge A.F. and A.M. Dr. Gower is survived by two sons and one daughter.

Contribution à l'Amélioration du Matériel Chirurgical Employé dans le Traitement de la Pyorrhée Alvéolaire* (Suite)

par JULES THEBAUD

*Présentation de quelques
Instruments Utilisés dans la
Périodontie Clinique.
1ère partie (Suite).*

Pour mieux faire ressortir l'utilité et l'application immédiate des instruments que nous présentons ici, ils seront comparés à ceux que l'on emploie couramment dans les deux méthodes chirurgicales, ce qui permettra en même temps d'expliquer leur mode d'emploi. En passant en revue tous les moyens techniques qui se rapportent aux différentes phases, nous croyons nécessaire de considérer en premier lieu, la période préparatoire qui commence par le diagnostic.

1) PHASE DU DIAGNOSTIC

Après avoir constaté "de visu" la teinte, la densité, la ligne de contour et d'attache de la gencive, et vérifié la présence de sécrétions et le degré de mobilité des dents, on dispose, en plus de la radiographie, de la sonde pour explorer le sillon gingival et déterminer la profondeur des clapiers pyorrhéiques.

EMPLOI DE LA SONDE ORDINAIRE. Les sondes fournies couramment à la profession dentaire sont présentées ainsi dans les catalogues: (Fig. 1).

Mais comme nous venons de l'expli-



A) Une paire de sondes rondes graduées

quer, la forme donnée à ces sondes droites et rigides en acier, suivant un seul plan, constitue un manque de commodité à cause de la surface convexe de la partie coronaire des dents, de la courbure des arcades, et de la situation qu'occupent parfois les clapiers par rapport à l'axe des dents.

Une Technique Nouvelle

En raison de ces circonstances défavorables, nous avons expérimenté avec succès, une paire de sondes graduées, suffisamment recourbées pour permettre l'exploration des culs-de-sac pyorrhéiques, en observant la direction axiale des dents, et en minimisant l'inconvénient de distendre ou de lacerer la muqueuse gingivale. (Fig. 2).

*Travail primé au Concours Casgrain-Charbonneau 1946



FIG. 2

Nous basant sur le principe que toutes les sondes (*DOIVENT ETRE GENERALEMENT POURVUES D'UNE CERTAINE FLEXIBILITE*), ces sondes ont été fabriquées en argent malléable. Bien qu'elles aient une forme définitive, le degré de malléabilité du métal qui les compose rend leur adaptation plus facile à la surface convexe de la couronne et du collet des dents.

Pour apporter plus de précision dans le repérage des clapiers interdentaires très profonds et en apprécier la béance, nous pensons que l'emploi des deux sondes, droite et gauche à la fois, est parfois très pratique. (Fig. 3).

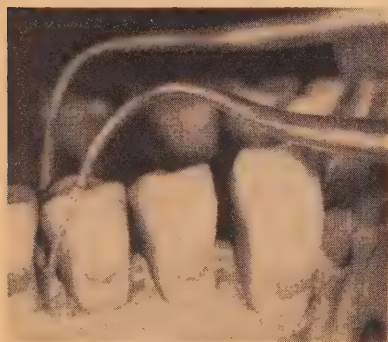


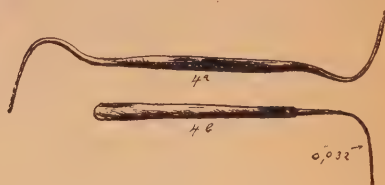
FIG. 3

C'est l'avantage que donnent les deux sondes montées sur des manches séparés. Mais pour plus de commodité, les mouvements du sondage sont plus rapides

quand ils sont exécutés au moyen des deux instruments, 1 et 2, montés, aux extrémités d'un même manche. (Dessin 4a).

B) Une paire de sondes plates graduées.

Nous avons pratiqué aussi avec satisfaction des essais avec des sondes malléables en fil d'acier inoxydable, No 00, 032 soudées à des manches ordinaires (Dessin 4 b). L'expérience courante démontre la facilité avec la-



quelle un objet plat peut être introduit dans une fente ou dans un livre sans trop en écarter les bords, contrairement à l'introduction d'un objet rond, qui a ten-



FIG. 4

dance à les ouvrir et à les déformer pour en atteindre l'extrémité ou le fond. (Dessins 5 et 6), nous employons une autre paire de sondes plates (droite et gauche) auxquelles nous avons imprimé une légère courbure (Figs 4 et 5).

Elles sont aussi en argent malléable dont la flexibilité facilite une parfaite adaptation au collet des dents, au moment de les introduire sous la gencive.



DESSIN 5

Pour rendre plus aisée la lecture des mesures inscrites sur ces sondes, elles sont pourvues de quatre petites échancrures de 2 m/m chacune (*Dessin 7*). La première échancrure ne commence qu'à un millimètre de la pointe de l'instrument, cette marge correspond à peu près à la **PROFONDEUR DU SILLON GINGIVAL NORMAL**.

LA DENSITE ET LA TRANSPARENCE du bourrelet gingival peuvent être facilement contrôlées, en faisant courir cette sonde, sous le bord mince de la gencive. *Fig. 6*.



DESSIN 6

Cette sonde est d'une grande valeur pour celui qui désire explorer minutieusement les sillons ou les culs-de-sac sur les cotés buccal et lingual, et pratiquer la gingivectomie avec réserve et modération, sur ces parties, pour lesquelles la radiographie ne donne aucun détail. Mais

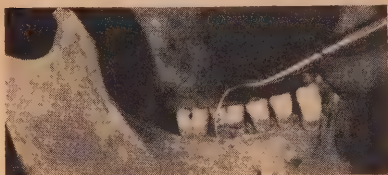


FIG. 5

en imprimant à l'instrument l'inclinaison voulue, pour qu'il pénètre dans les espaces interdentaires mésialement ou distalement, on atteint aussi facilement le fond des culs-de-sac. L'enregistrement de leur profondeur a été précisé par les sondes rondes placées dans les espaces interdentaires. (*Figs 7 et 8*).

PHASE DU DETARTRAGE ET DU RACLAGE AU MOYEN DES "SCALERS".

Nous pensons que l'application des mesures prophylactiques au moyen des "scalers" des roues, et des curettes présentées par Black, Tompkin et Heyman, est amplement exécutée au moyen de ces instruments qui répondent bien à nos besoins.

2) GINGIVECTOMIE

1ère phase

a) Ablation du Bourrelet Gingival

Les lancettes et bistouris employés dans la gingivectomie sont d'une commodité remarquable, particulièrement les lancettes droite et gauche de Merrifield et celles de MacFarland, ainsi que les "résecteurs" de Towner et de Ward dont l'accès à l'intérieur des interstices dentaires, permet d'atteindre plus profondément les tissus à réséquer.

2ème phase

b) Curetage des Tissus Pathologiques

Le jeu ou le "set" des curettes présentées par McCall, Younger et d'autres ont

fouloir, facilite son chevauchement sur la crête du maxillaire, entre les dents, sous la moindre pression, entraînant ainsi

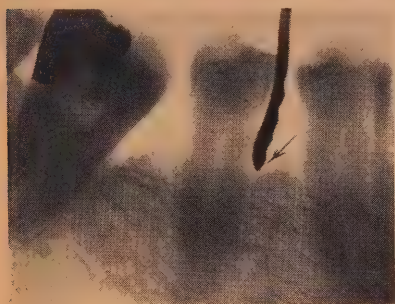
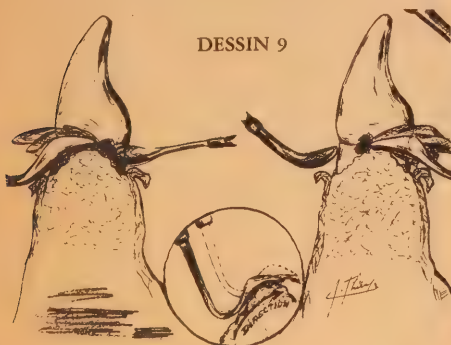


FIG. 8

vers la curette les moindres particules de tissus pathologiques, dont **L'ABLATION TOTALE EST DE REGLE**. (Dessin 9).

La pointe de ce fouloir est assez aiguë pour traverser n'importe quel espace interdentaire, en entraînant dans son trajet les morceaux de gaze ou de coton, servant de tampon pour véhiculer les débris de tissus. Les curettes peuvent s'appuyer contre la pointe de l'instrument pendant le curetage, mais elles s'ébrècheraient rapidement si elles s'y butaient trop souvent.

DESSIN 9



A quelques millimètres de son extrémité effilée l'instrument est renflé, ce qui sert de point d'arrêt, et l'empêche de dépasser l'espace interdentaire, contrairement à la spatule et aux instruments de fortune qui n'offrent aucune stabilité dans ce sens. (Dessin 8).



DESSIN 8

Notre série de 4 fouloirs est d'application facile. (Fig. 10).



FIG. 10

Le fouloir No 3, plus fin, est d'un emploi pratique du côté buccal entre les espaces interdentaires, dans la région antérieure des deux maxillaires, de canine à canine. (Figs 11 et 12).



FIG. 11

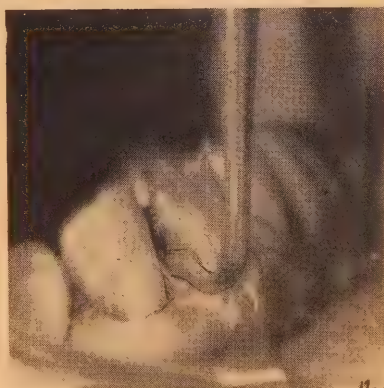


FIG. 12

Les Nos 1 et 2 servent pour les interstices situés entre les molaires et les prémolaires; du côté droit ou gauche des deux maxillaires. Ils s'appliquent buccalement ou lingualement, selon la région opérée. (Figs 13 et 14).

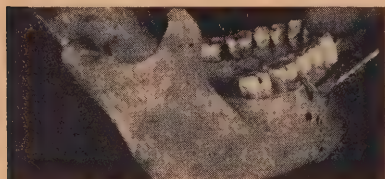


FIG. 13

Le No 4 est aussi un fouloir, une espèce de "pousse-tissus", qui agit dans une direction inverse des 3 autres, c'est-à-dire du côté lingual en direction buccale; il est en forme de crochet, ce qui facilite la stabilité des forces appliquées de l'intérieur à l'extérieur de la bouche.



FIG. 14

Il ne peut être utilisé que de cette façon. (Fig. 15).

Pour pratiquer l'ablation des tissus blanchis et coagulés dans les espaces interdentaires sous l'effet des électrodes

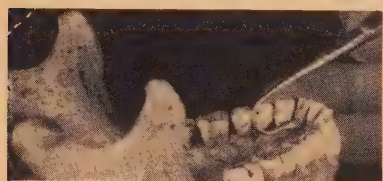


FIG. 15

bipolaires de l'appareil de Webb, nous employons ces fouloirs avec satisfaction, car l'enlèvement de la partie coagulée

des tissus, conditionne la guérison des gencives qui se fait bien plus rapidement que si on les laisse tomber d'eux-mêmes.

Curetage Radical ou "Flap Operation" a) 1ère Phase. Dissection de la Muqueuse Gingivale

Après la séparation de la muqueuse du côté labial, du côté gingival au moyen d'une incision pratiquée dans les papilles, dans le sens horizontal, l'écartement des gencives se fait ordinairement au moyen d'une spatule ou d'un "périostéotome".

Spatules Courantes

Bien que les spatules employées dans la radicale modifiée soient de plus petite dimension que celles employées dans la



FIG. 16

technique de Neuman, et dans les interventions buccales, d'une façon courante, les fabricants d'instruments n'offrent jusqu'ici que des spatules encore trop grosses et trop épaisses pour cette sorte d'opération. (Fig. 16).

Notre Spatule de Petit Calibre

En raison des précautions qu'il y a lieu d'apporter dans la manipulation des



FIG. 17

papilles gingivales et de la muqueuse au moment de leur séparation d'avec le périoste, il est présenté ici une petite spatule à bout effilé, dont le plus grand diamètre est seulement de $3\frac{1}{4}$ m/m. (Figs 17 et 18).



FIG. 18

Elle a l'avantage d'être introduite facilement sous la muqueuse sans provoquer de déchirures, grâce au glissement de sa face dorsale (qui est nettement convexe) contre le périoste du maxillaire. Sa courbure permet de s'en servir à la manière d'un levier modéré.

b) 2ème phase: Ecartement de la Muqueuse

Après la dissection de la gencive des deux côtés de l'arcade, elle est maintenue durant le curetage et le raclage, au moyen de rétracteurs ou de crochets. Les rétracteurs employés à cette fin sont ordinairement plats et recourbés à leur extrémité. Ils sont de grosse dimension et se déplacent trop facilement pendant l'intervention. Les crochets ou pincettes à tissus sont susceptibles d'entraîner des déchirures



FIG. 19

du fait de leur insertion dans la fine muqueuse écartée; parfois la dissection de la gencive est tellement modérée que les papilles à *SOULEVER* ne permettent pas d'y insérer les pointes. (Fig. 19).

Notre Paire de Rétracteurs Spéciaux

Pour des fins de commodité, nous employons avec succès un petit rétracteur à 2 griffes, Fig. 20. Cet instrument a l'avantage; 1o) d'écarter la muqueuse en minimisant la traction, exercée sur les tissus, la pointe des griffes s'adaptant *ENTRE LE PERIOSTE ET LA MUQUEUSE ET NON DANS LA MUQUEUSE MEME*; 2o) il facilite l'as-



FIG. 20



FIG. 21

séchage du champ opératoire et le raclage du périoste dans la béance des griffes. L'extrémité de l'instrument étant d'un plus petit diamètre que sa partie moyenne, son insertion et son adaptation au niveau des interstices se font aisément. (Figs 20 et 21).

3ème phase. Curetage des Tissus Pathologiques

Comme pour la gingivectomie, nous avons à notre disposition un choix considérable de curettes, mais après le curetage en masse des tissus superficiels, le refoulement des particules de tissus logés au fond des interstices dentaires, se fait ordinairement comme dans la gingivectomie, à l'avenant, au moyen d'un instrument quelconque, dont on se sert avec les pointes de gaz ou de coton pour les pousser au devant de la curette.

Ici encore, on a recours à l'emploi d'une spatule ou d'un périostéotome dont la courbure et les dimensions ne correspondent aucunement à cette besogne délicate.

A la recherche d'un "pousse-tissus", nous employons, comme dans la gingivectomie, des fouloirs à coupe triangulaire, dont les avantages suppléent largement au manque total d'instruments spéciaux pour cette partie de l'intervention (Desin 9).

Comme il a été indiqué plus loin, les instruments Nos 1 et 2, (droit et gauche), servent pour le côté buccal et

lingual des deux maxillaires; des canines aux molaires. (Figs 13 et 14).

Le No 3, qui est un fouloir droit, s'applique du côté labial pour les régions antéro-supérieures et antéro-inférieures de canine à canine. (Figs 11 et 12).

Le No 4 est un fouloir qui s'applique de l'intérieur à l'extérieur, de canine à canine. (Fig. 15).

d) 4ème phase. Limage du Cément et Raclage du Bord Alvéolaire

La variété des limes cémentaires répond bien à nos besoins, sauf les limes en forme de scie pour sectionner les tissus mous et racler le bord alvéolaire; cet instrument n'a pas encore obtenu beaucoup de sympathie, parce que de caractère mutilant, et trop peu délicat pour cette chirurgie minutieuse du paradentium. Nous recourons avec plus d'avantage aux curettes de McCall dans le même but.

e) 5ème phase. Suture des Muqueuses Buccale et Linguale Après l'Ablation des Tissus Pathologiques

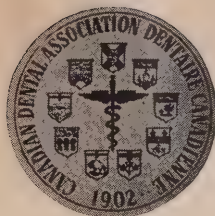
Comme il a été expliqué plus loin, la méthode de Neuman tend à être délaissée en raison des complications qui en résultent, parfois du fait de l'infection qui peut se développer au niveau du périoste, à la suite de la pénétration des débris alimentaires, à l'occasion du relâchement trop fréquent des parties suturées de la gencive.

(à suivre)

LE DENTISTE ET L'ENFANT

L'Indiana Dental Association et la Division dentaire du State Board of Health ont récemment commandité une série de causeries données par le docteur W. T. McFall de Caroline du Nord (Monthly Bulletin, avril 1946) sur la nécessité de l'abord spécialisé dans le traitement dentaire des enfants. Le docteur McFall dit que le dentiste moyen n'a pas étudié l'enfant; par suite, les salles d'attente et d'opération et la technique dentaire elle-même n'attirent pas d'ordinaire les enfants. Trop souvent le dentiste a plus peur de l'enfant que l'enfant a peur de lui. Pour réussir avec l'enfant comme patient, le dentiste doit établir dans la salle d'opération un système régulier qui allie habilement l'agrément, la fermeté et l'exactitude scientifique. Les enfants savent instinctivement si le dentiste et ses aides sont sincères. Il faut donc dire la vérité à l'enfant sur le traitement qu'il va suivre et lui inspirer confiance tant par l'entourage que par la technique dentaire.

—"Santé et Bien-Etre Social au Canada", septembre 1946.



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LA SOCIÉTÉ DE STOMATOLOGIE DE QUEBEC

par **RODOLPHE TALBOT, D.D.S., L.C.D., Président**

Il me fait plaisir de répondre à l'invitation de M. le rédacteur du Journal de l'Association Dentaire Canadienne, le docteur Gérard de Montigny, et de donner un bref aperçu des principales activités, qui occuperont notre Société, au cours de la présente année académique.

Depuis sa fondation, en 1924, par le docteur Emile Beaulieu, la société de Stomatologie de Québec a rapidement franchi les étapes, qui l'ont conduite à l'âge adulte.

Il n'est que juste de payer un tribut de reconnaissance à ses pionniers et bâtisseurs, qui ont prodigué leur dévouement et leur savoir-faire, pour la maintenir dans un progrès constant. Il nous faudrait nommer bien des confrères; citons au moins à l'ordre du jour, celui qu'on pourrait appeler son "secrétaire perpétuel", puisqu'il a toujours été maintenu à son poste depuis les débuts, le Dr Emile Bourdon.

Aujourd'hui la Société est plus que jamais en mesure de réaliser le but de sa fondation: promouvoir le progrès scientifique de la profession. De telles activités, d'ailleurs, ne sont-elles pas plus nécessaires que jamais, car ce n'est un secret pour personne, encore moins pour ceux qui ont été initiés à l'art médical, que les dernières décades ont apporté à la chirurgie et à la profession dentaire en particulier, des améliorations et des découvertes qu'il n'est pas permis à un professionnel, soucieux de l'honneur de sa profession et désireux de rendre service à ses semblables, d'ignorer.

Pour rafraîchir nos connaissances et nous tenir continuellement au point avec les plus récentes découvertes, le côté scientifique du travail professionnel sera encore en évidence, cette année.

Nous comptons parmi nos confères d'éminents praticiens; ils nous feront part de leurs expériences et de leur science. Nous espérons pouvoir

bénéficier aussi de la visite de savants venus de l'extérieur qu'il est toujours utile et agréable d'entendre.

Nous voulons toucher la plupart des sujets d'intérêt constant concernant la dentisterie opératoire, la prothèse, l'orthodontie, l'anesthésie et la chirurgie et même la radiologie dont le concours est devenu nécessaire et un aide précieux à l'exercice de notre art.

De plus pour le chirurgien-dentiste, à la pratique de la profession, se mêlent l'organisation et l'administration du bureau. Un spécialiste du monde des affaires viendra nous exposer sa conception d'un bureau scientifiquement organisé.

Nous espérons pouvoir ouvrir encore plus largement les horizons ou nos regards d'hommes et de chrétiens pourront se déployer à leur aise.

A notre époque ou le Chef de la chrétienté a donné une impulsion si vigoureuse à l'apostolat des laïques et fait une invitation si pressante d'y participer, il nous semble qu'il est impossible de nous dérober à ce devoir. Notre profession n'y trouvera-t-elle pas un accroissement de vitalité et le sentiment de prendre part à une oeuvre universelle à laquelle tous nous devrions être fiers de collaborer. Ce sujet sera un magnifique complément à nos entretiens.

Mentionnons pour terminer qu'un des bienfaits les plus encourageants de nos réunions est de resserrer les liens d'amitié et de confraternité entre les membres de notre profession. Les rencontres ou l'on poursuit ensemble un but de perfectionnement désintéressé pour mieux servir la société et pour le plus grand honneur de notre profession, nous procurent une magnifique occasion de nous estimer d'avantage.

Nous savons que nous pouvons compter sur la collaboration et la bienveillance de tous. Ensemble, la main dans la main, nous pourrons faire oeuvre utile.

NOEL 1946 et JOUR DE L'AN 1947

Le monde d'après-guerre est en face de problèmes, d'une nature différente, mais d'une solution peut-être plus difficile que ceux, qui se présentaient durant le conflit mondial 1939-1945.

Carence de production, grèves, incertitudes, misères des peuples vaincus, tâtonnements, dissidence des vainqueurs. Idéologies différentes de fond et de forme, méfiance, inquiétude, malaise. La vie des peuples et des individus est cahotée, agitée, incertaine du demain. Tel est le tableau de l'univers, en cette fin de 1946.

Souhaitons aux gouvernants la volonté et l'intelligence nécessaires au règlement des difficultés de l'heure présente. Formons des voeux pour que les hommes de l'an de grâce 1947 mettent dans l'ombre, ou les ont plongés les erreurs de l'ère moderne, un peu de lumière surnaturelle. Plus de charité, plus d'amour, plus de compréhension de son semblable. Cette bonne entente, que nous voulons voir s'établir entre les nations, réalisons-la dans notre domaine individuel et professionnel. La société est formée de

«Ilules constituées par différents groupes d'hommes, ayant les mêmes préoccupations, un idéal identique. Notre profession dentaire est un de ces éléments de notre tout. Mettons de l'ordre, chez nous. Que d'autres groupements fassent de même et notre monde ne s'en sentira que mieux.

La santé du total repose sur l'intégrité de chacun de ses membres. C'est la pensée, que nous avons, en présentant aux membres de l'Association Dentaire Canadienne et à ceux du Québec français, en particulier, nos meilleurs souhaits de "Bonne Année" pour l'année nouvelle, qui commencera sous peu.

G. DE M.



COMITE EXECUTIF DE LA SOCIETE DENTAIRE DE MONTREAL

Première rangée, de gauche à droite: Dr Louis Lépine, trésorier; Dr Victorien Dubé, secrétaire; Dr Jacques Lemers, président; Dr Amberst Hébert, ariseur; Dr Paul-Emile Poitras, archiviste. Deuxième rangée, de gauche à droite: Dr Guy Langelier, ass.-secrétaire; Dr Gabriel Lord, conseiller; Dr Lucien Lajoie, conseiller.

Séance de Janvier 1947 de la Société Dentaire de Montréal

Les membres de la Société Dentaire de Montréal sont spécialement invités à entendre la communication du docteur McGregor, spécialiste de Toronto, qui traitera de "Dentisterie chez les enfants", le 17 janvier.

CHEZ NOUS ET AILLEURS

La Province d'Alberta augmente son octroi

La province d'Alberta vient de décider d'augmenter la cotisation de ses membres à l'A.D.C. d'un dollar par année. L'Alberta est la quatrième province à hausser de quatre dollars à cinq dollars par membre, son octroi annuel à l'Association Dentaire Canadienne.

Fonds d'Assistance du C.A.R.C. (R.C.A.F.)

Au cours de la guerre, des fonds ont été amassés par diverses unités du Corps d'Aviation Royal Canadien pour venir en aide aux nécessiteux, membres ou anciens membres du Corps et leurs dépendants.

Les traitements dentaires sont compris dans l'assistance, que cette organisation offre aux membres ou licenciés du Corps d'Aviation et à leur famille. Quand un dentiste reçoit une telle demande, il est prié de communiquer avec le bureau-chef du Royal Air Force Benevolent Fund, Ottawa, Ont. et d'indiquer en détail les traitements requis.

Les services dentaires sont rémunérés au tarif du Ministère des Affaires des Vétérans.

Séance de novembre de la Société Dentaire de Montréal

Les activités de la Société Dentaire de Montréal pour le mois de novembre ont consisté en une conférence, donnée par le docteur Aimé Couture, d'Ottawa, sur: "La Reproduction des Dents antérieures en Acrylique pour Dentiers immédiats". Cette communication était illustrée de projections et de modèles des plus intéressants. Le conférencier sut captiver son auditoire nombreux, qui reçut un enseignement clinique des plus précis et des plus clairs.

Le parti d'huîtres annuel de la Société Dentaire de Montréal eut lieu, le 19 novembre. Cette fête, donnée dans le gymnase de l'Ecole Normale Jacques Cartier, groupait une assistance des plus nombreuses.

Nécrologie

Le docteur C. E. Bourdon, de la ville de Québec, est décédé au cours du mois d'octobre, à l'âge de 47 ans. Le docteur Bourdon avait reçu le diplôme de dentiste en 1924 et avait toujours pratiqué à Québec.

Nos sympathies à la famille et spécialement au docteur Emile Bourdon, son frère.

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(5½ jours complets)

Du 24 fév. au 8 mars
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(2 semaines complètes)

Les dentistes, désirant recevoir des détails supplémentaires sur ces cours, sont priés de communiquer avec le doyen, le docteur Ernest Charron, 2900 Boul. du Mont-Royal, Montréal.

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